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A GRAPHIC SUMMARY OF GRAZING ON THE PUBLIC LANDS OF THE INTERMOUNTAIN REGION

PART III. PRESENT USE OF THE PUBLIC LAND GRAZING RESOURCES BY SIZE AND TYPE OF LIVESTOCK ENTERPRISES

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March 15, 1942

A GRAPHIC SUMMARY OF GRAZING ON THE PUBLIC LANDS OF THE INTERMOUNTAIN REGION[1/]

PART III. PRESENT DISTRIBUTION OF THE PUBLIC LAND GRAZING RESOURCES TO THE DIFFERENT SIZES AND TYPES OF LIVESTOCK ENTERPRISES

By Arthur H. Roth, Jr., Assistant Economist

This is the third and final in this series of graphic presentations showing certain of the characteristics of use of public grazing lands in the Intermountain region. The first report gives a graphic analysis of public land grazing resources and of the recent trends in use of these resources. The second report shows seasonal use characteristics of public land grazing and the interdependence of seasonal grazing and feeds produced by irrigated agriculture. This third report, part III of the Graphic Summary, shows how public land grazing use is now distributed among different sizes and types of livestock enterprises.

This analysis of the present distribution of use of public land grazing is based upon the following concept of sizes and types of livestock operations:

1. The small livestock enterprise of diversified farms, 1 to 20 head of beef cattle, or 1 to 100 sheep.
2. The medium-size livestock enterprise of diversified farms, 21 to 40 head of beef cattle or 101 to 300 sheep.
3. The diversified stock farm and small stock ranch, 41 to 70 beef cattle, or 301 to 700 sheep.
4. Family stock ranches of minimum size, 71 to 100 head of beef cattle, or 701 to 1,500 sheep.
5. Family stock ranches of intermediate size 101 to 200 beef cattle or 1,501 to 2,500 sheep.

1/ U. S. Forest Service Region 4: Utah; Nevada, except the southwestern edge; Idaho, south of the Salmon River; and southwestern Wyoming. See figure 1.

6. Family stock ranches of large size, 201 to 600 beef cattle, or 2,501 to 5,000 sheep.
7. Large commercial operations, 601 to 1,000 beef cattle, or 5,001 to 10,000 sheep.
8. Very large commercial operations, over 1,000 beef cattle, or over 10,000 sheep.

Two analyses of the use of public land grazing by these different sizes and types of livestock operations are presented in this report. First is a graphic presentation showing, for the national forests of the Intermountain region, what percentage of the total numbers of livestock owned by permittees are admitted to the national forests for grazing. This is followed by graphic information showing, for the national forests and grazing districts, what percentage of total public land grazing is used by different size classes of livestock operations.

The purpose in presenting this information is to give a background for thinking on the subject of how the public land grazing resource can be made to yield highest economic and social values. There are situations where a public land grazing privilege makes it possible for diversified family-size farms to round out their operations with a livestock enterprise. There are other localities where public land grazing is too remote for use by the diversified farming areas, but that can be successfully used by specialized stock ranch operations of family size. And again there may be situations in this region where widely separated but complementary seasonal ranges are adapted to use and management by large-scale commercial operations having a capital structure able to stand the risk of heavy fluctuations in production and income. But the analysis of area resource economy is beyond the scope of this report. Our purpose here is to present one type of information useful to such analysis.

A word of explanation may be desirable regarding how these data were developed and how they are presented in the graphs that follow. Data for national forests were obtained from the commensurate property and livestock permit files of the Division of Range Management of the U. S. Forest Service Intermountain region. These data are for the year 1937, since the most comprehensive set of data were available for that year. Data for the grazing districts are taken from 1939-1940 licenses. This difference of two years in these two sets of data is of minor importance since no appreciable change has occurred in size or distribution of forest permits during this period.

Graphs are grouped by states, individual forest and grazing district graphs being preceded by a summary graph for the state or for the part of the state that is in the Intermountain region. Data for each national forest or grazing district are shown on one page. No data are presented for sheep on the Uinta, Payette, and Teton National Forests as the information was incomplete or not available for these forests.

The first set of graphs up to and including figure 28 shows what percent of the total number of livestock owned by forest grazing permittees are admitted to the national forests for grazing. As an example, the Manti National Forest graph, figure 22, indicates that there is very little difference between the various size classes in the percentage of the total number of cattle owned that use the forest range. For sheep, the percentage of total sheep owned that graze on the forest decreases as the size of operating unit becomes larger. In contrast with the situation on the Manti for cattle operations, note figure 3 showing the percentage of the total number of cattle owned by permittees that graze on the Boise National Forest. Here the percentage of cattle on

the forest decreases for larger operations. This is because the larger operators control private summer range outside the forest. There are no small sheep operations using this forest.

The second set of graphs, starting with figure 29, show how the total grazing use of the national forests and grazing districts is distributed to the different size classes of livestock operations. It should be emphasized again that these size classes are based upon total number of livestock operated and that this second set of graphs shows what percentage of the present grazing use of public lands is absorbed by the various size classes of livestock operations.

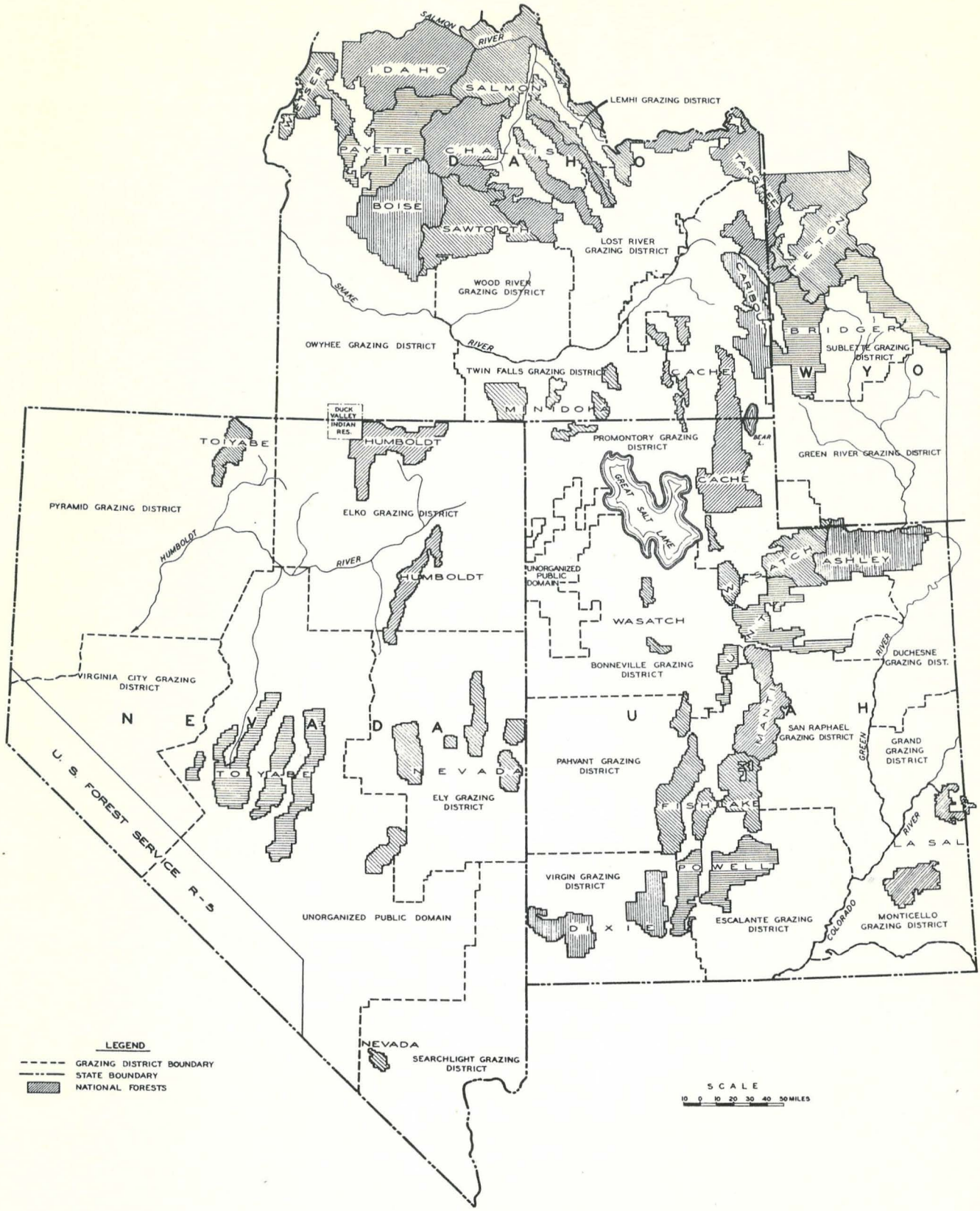
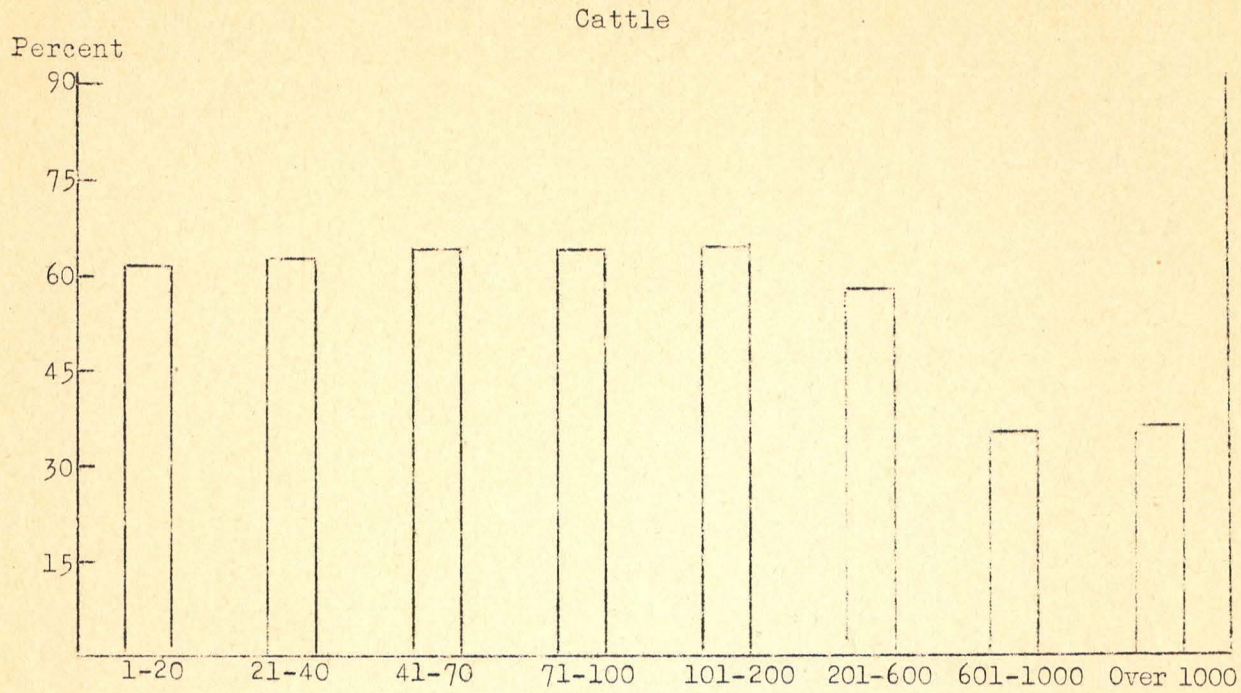


FIG. 1 NATIONAL FORESTS & GRAZING DISTRICTS IN THE INTERMOUNTAIN REGION - 1941



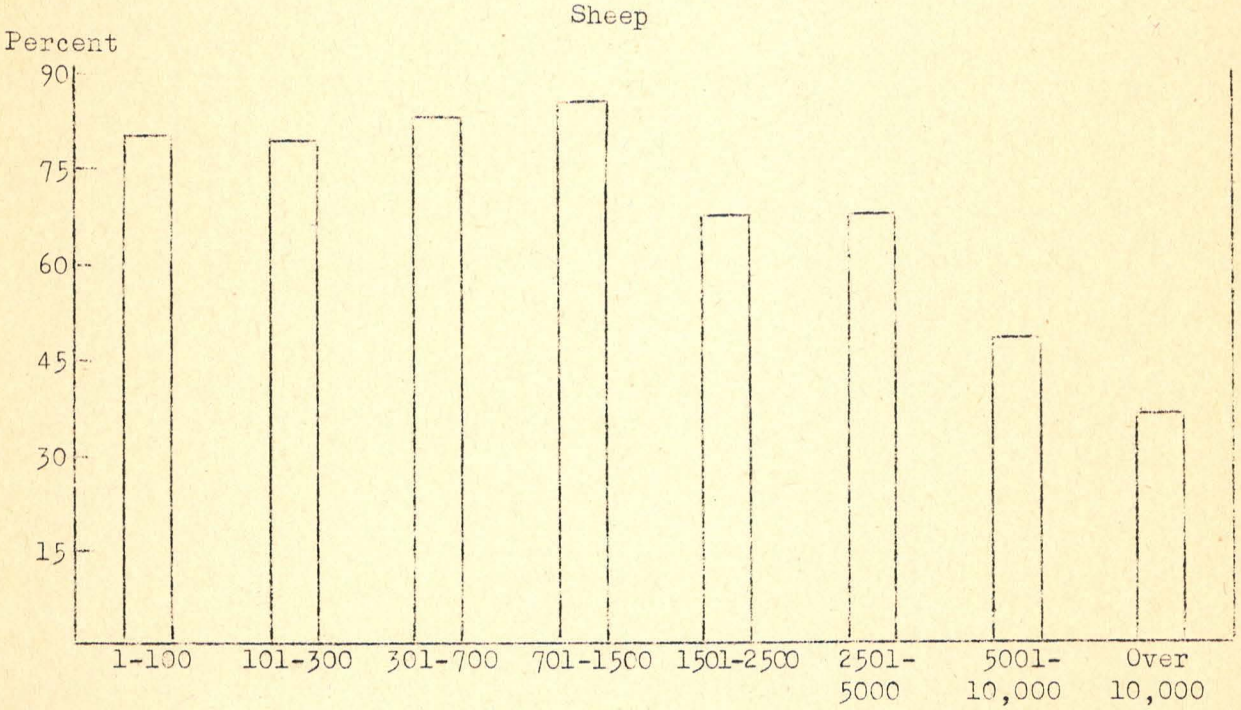
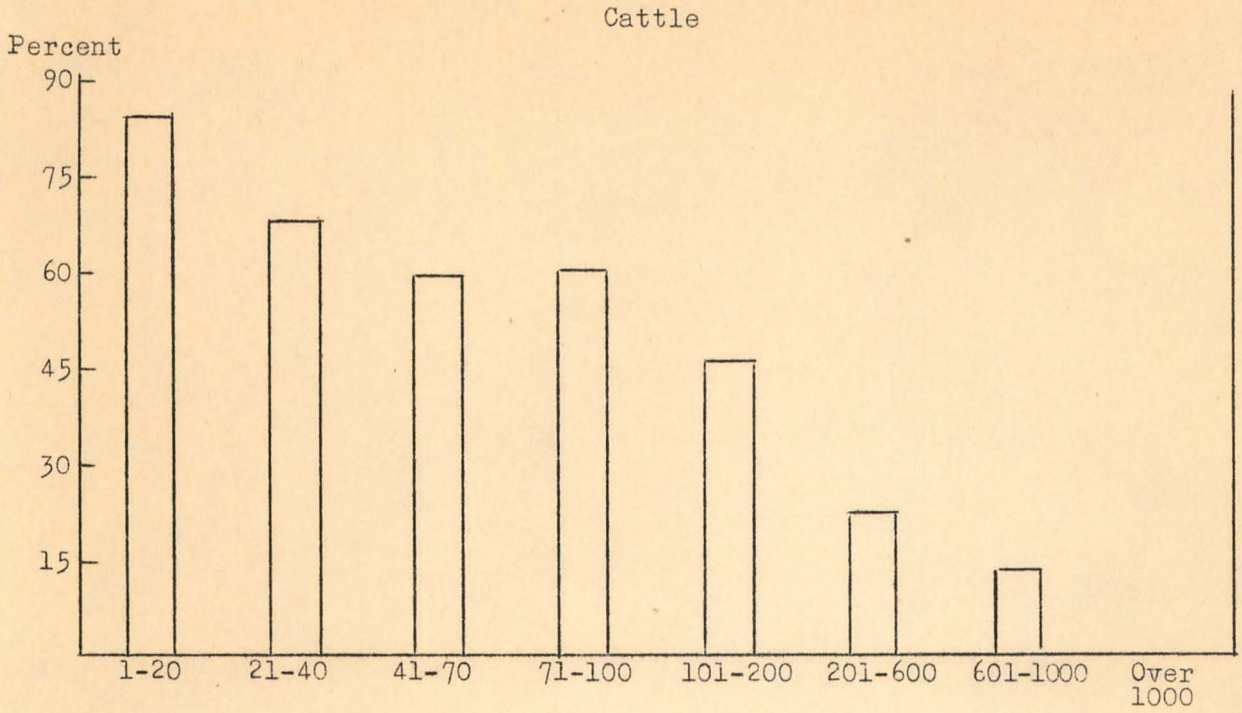


Figure 2.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the national forests of Idaho.



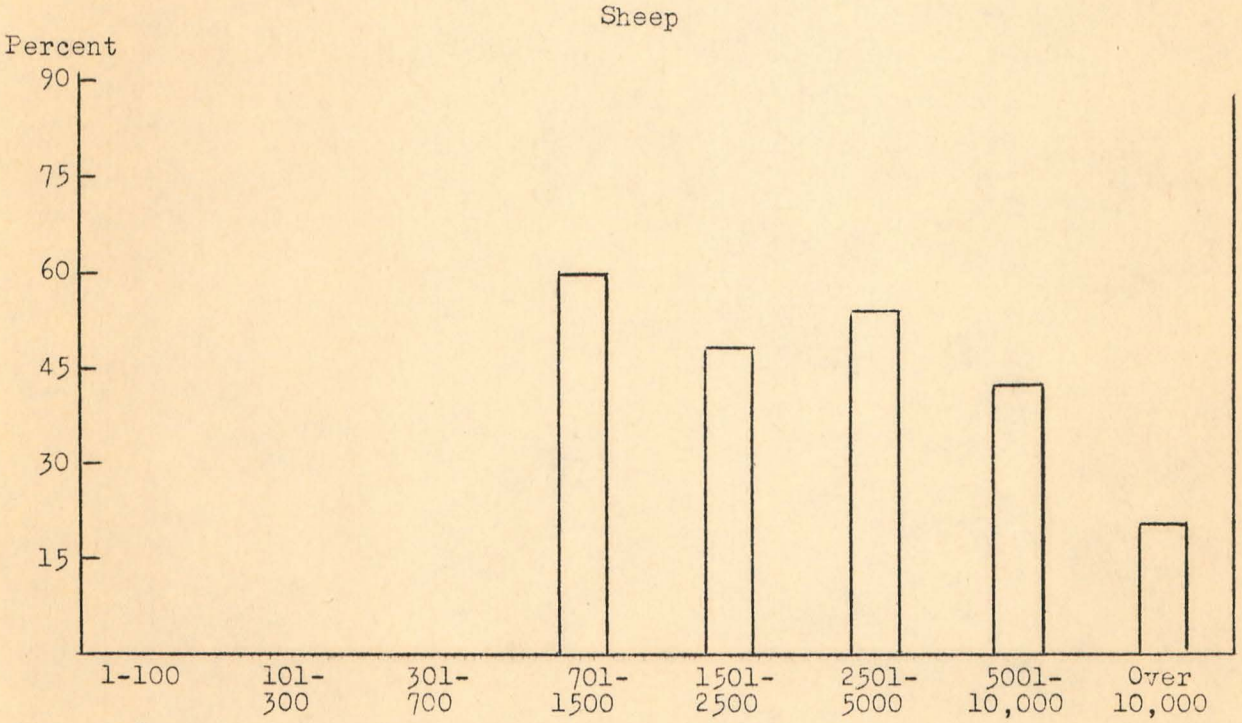
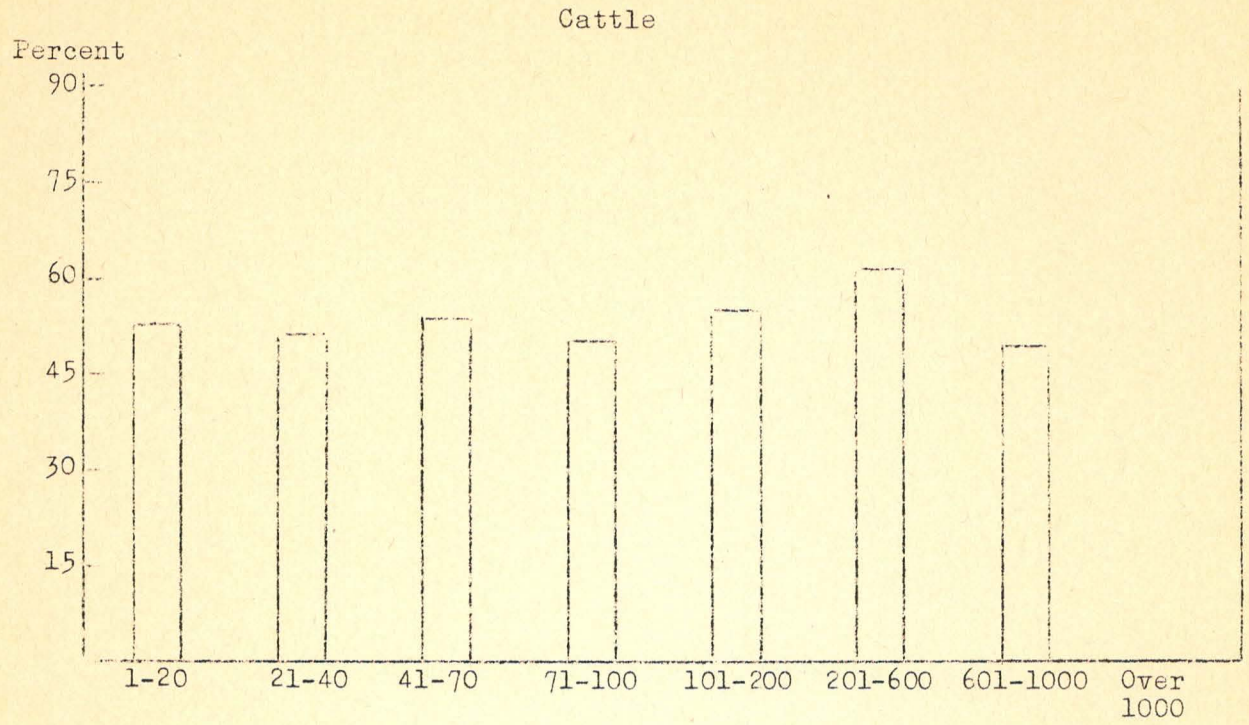


Figure 3.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Boise National Forest.



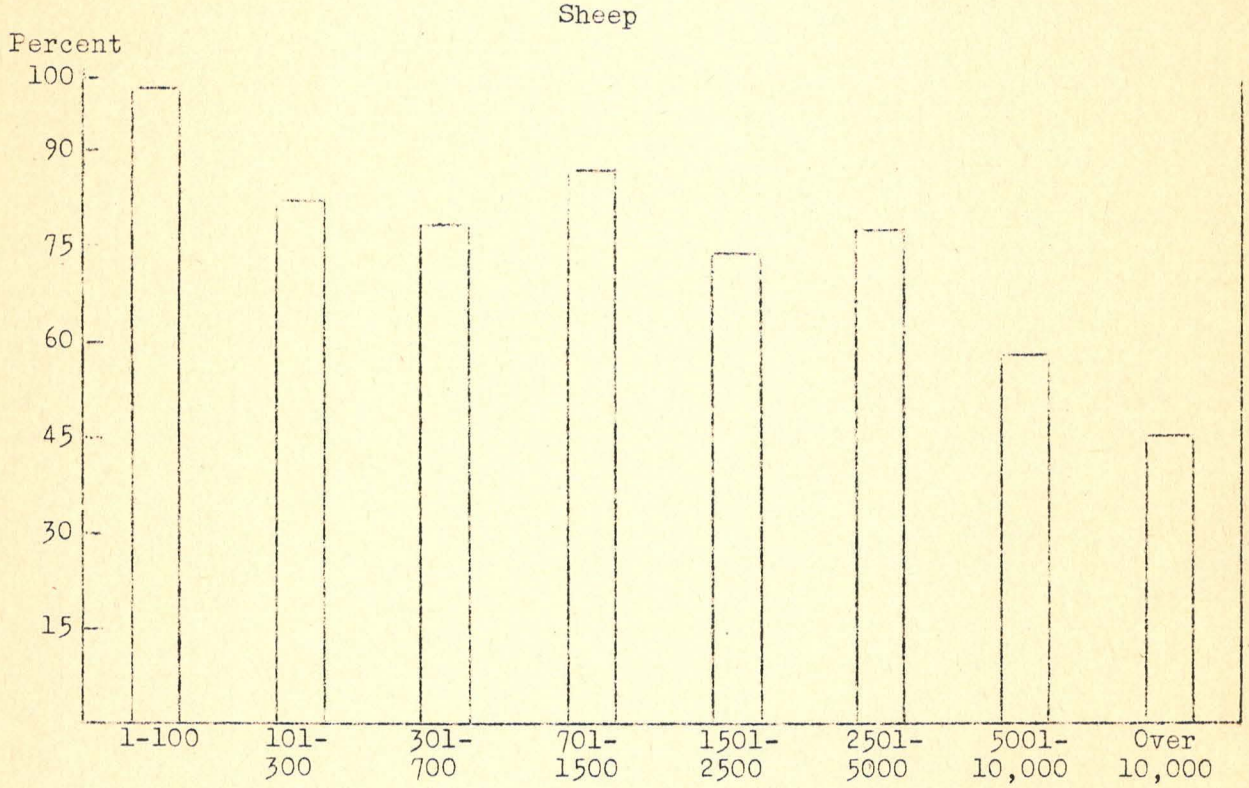


Figure 4.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Caribou National Forest.

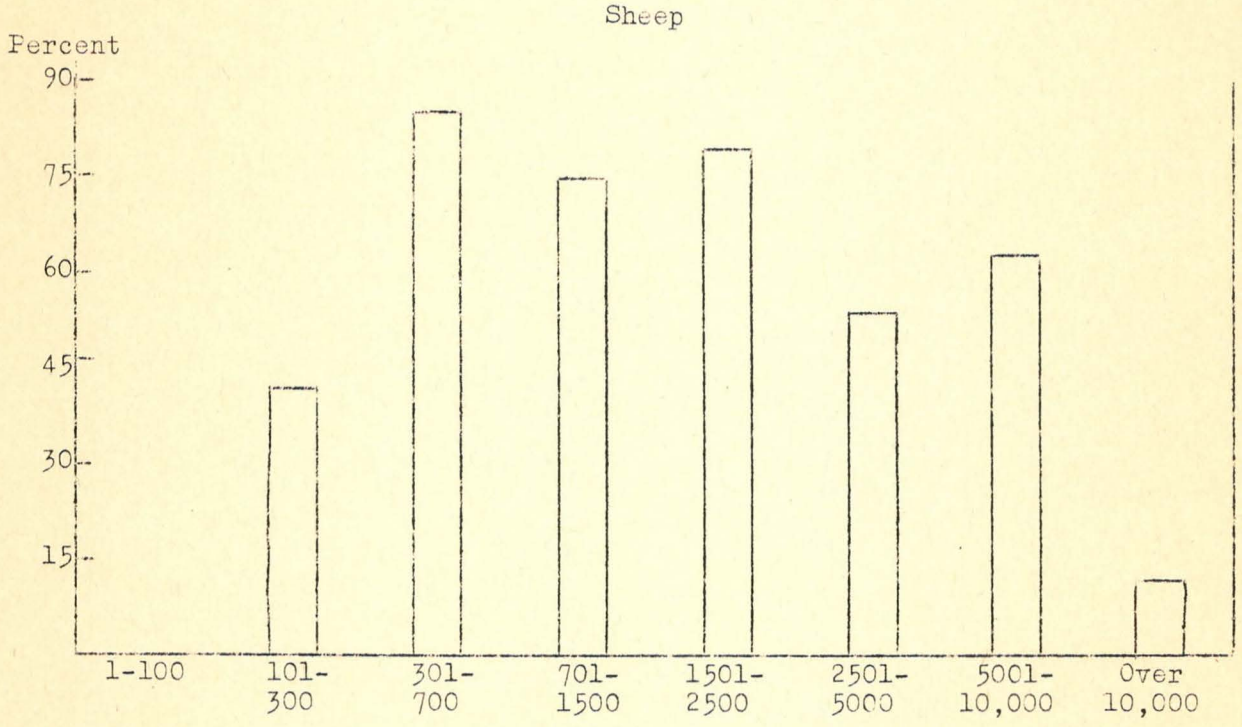


Figure 5.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Challis National Forest.

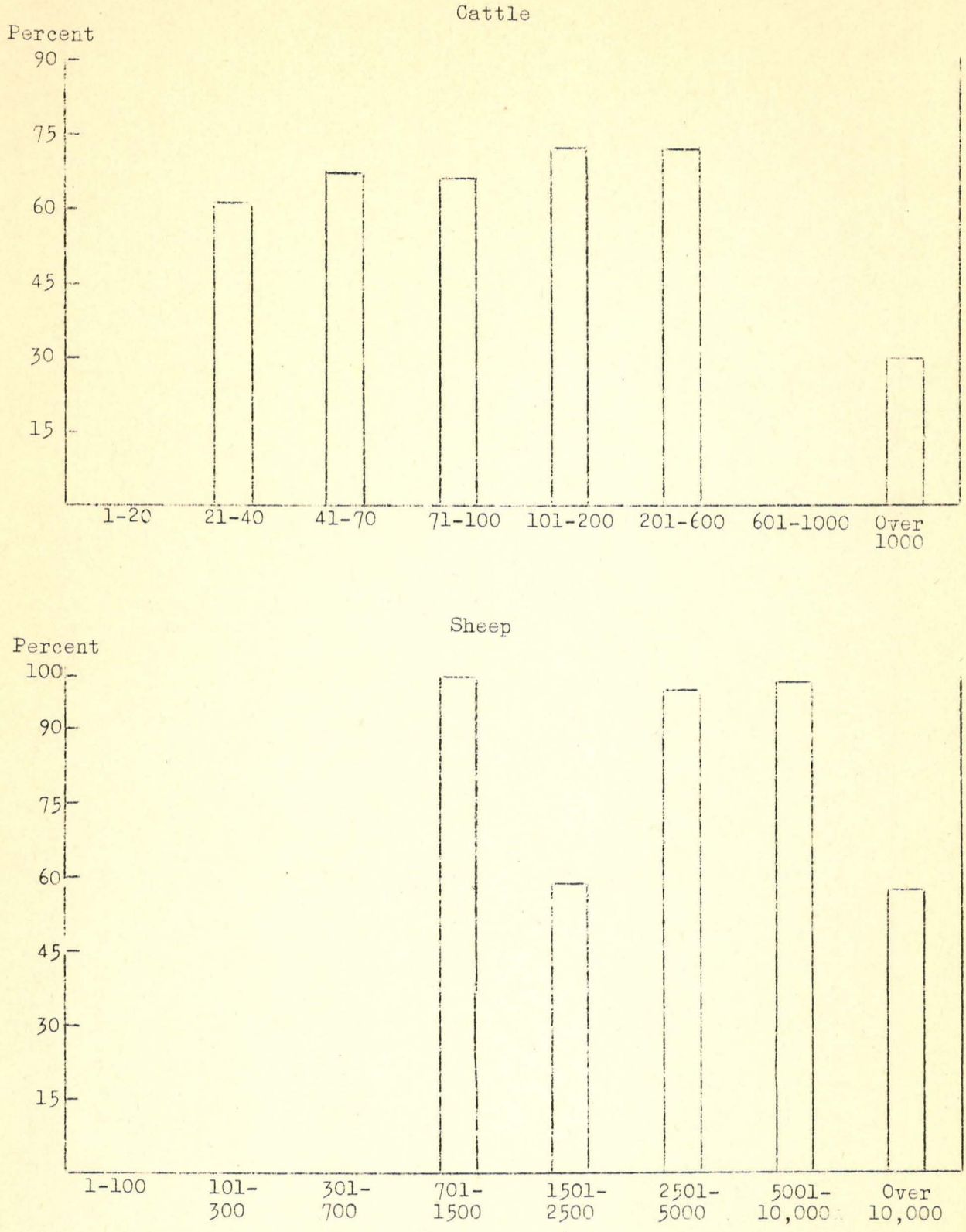
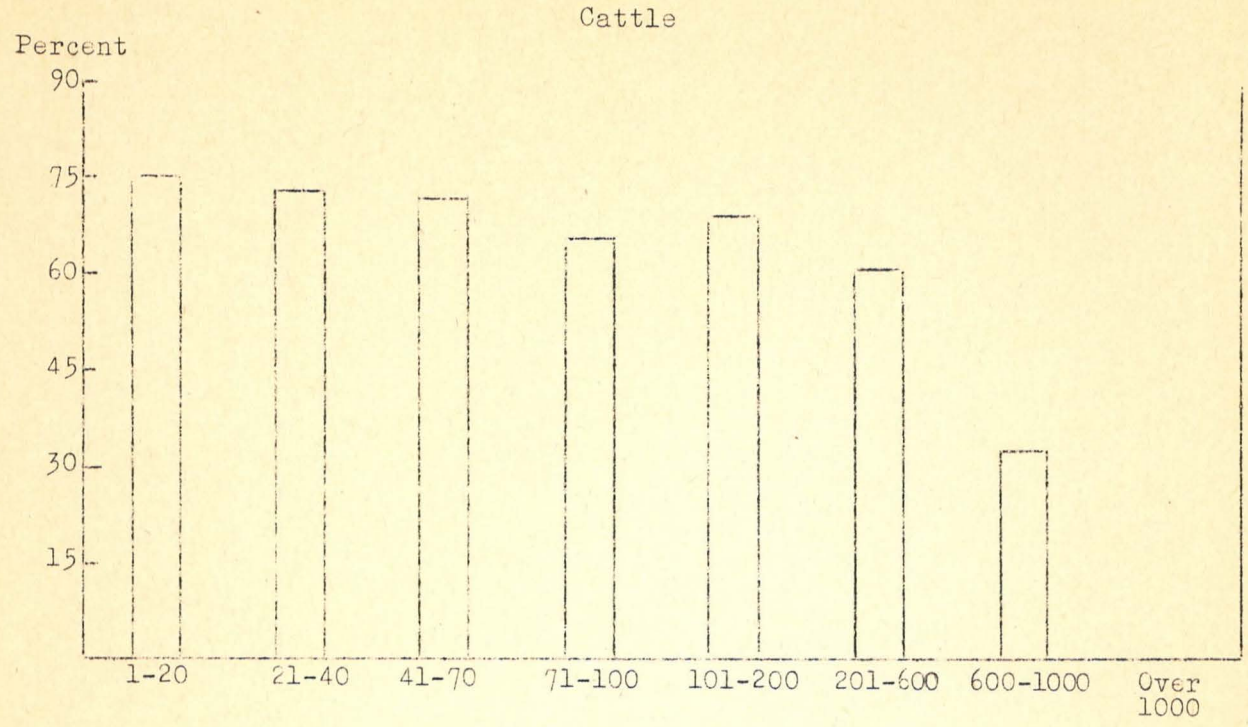


Figure 6.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Idaho National Forest.



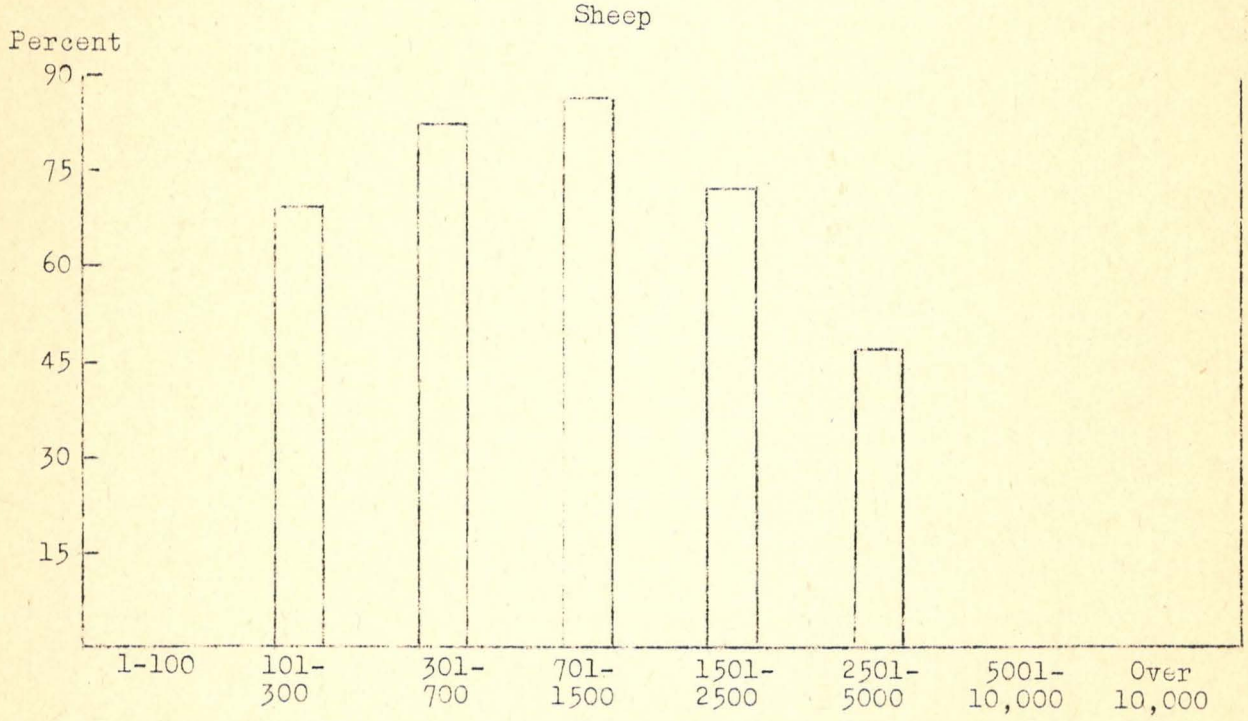


Figure 7.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Minidoka National Forest.

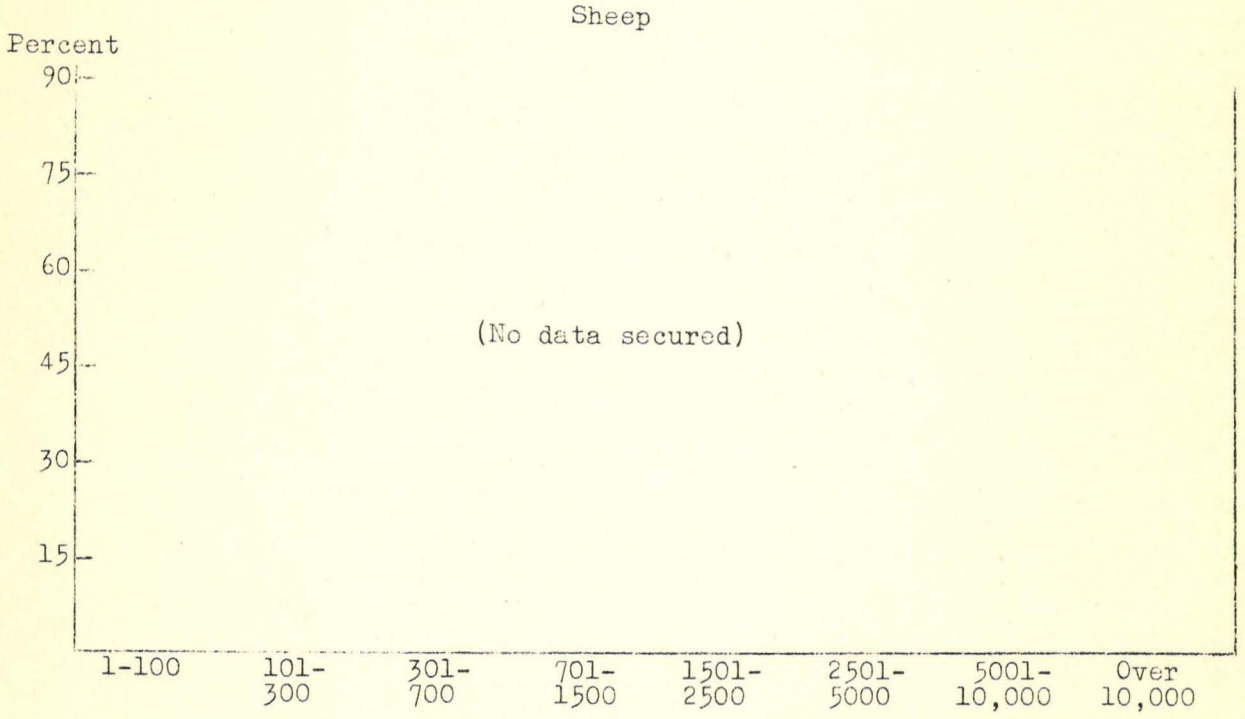


Figure 8.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Payette National Forest.

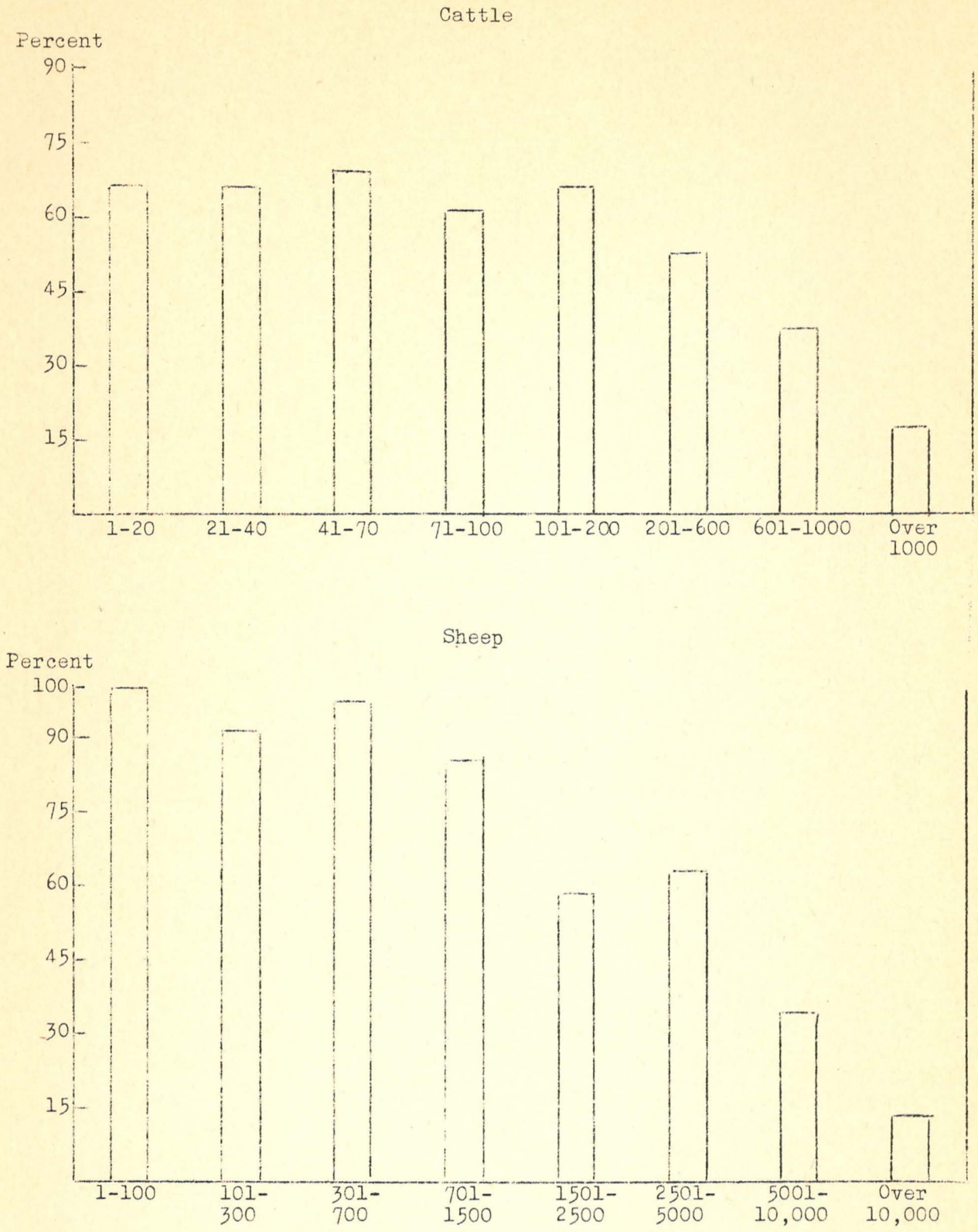
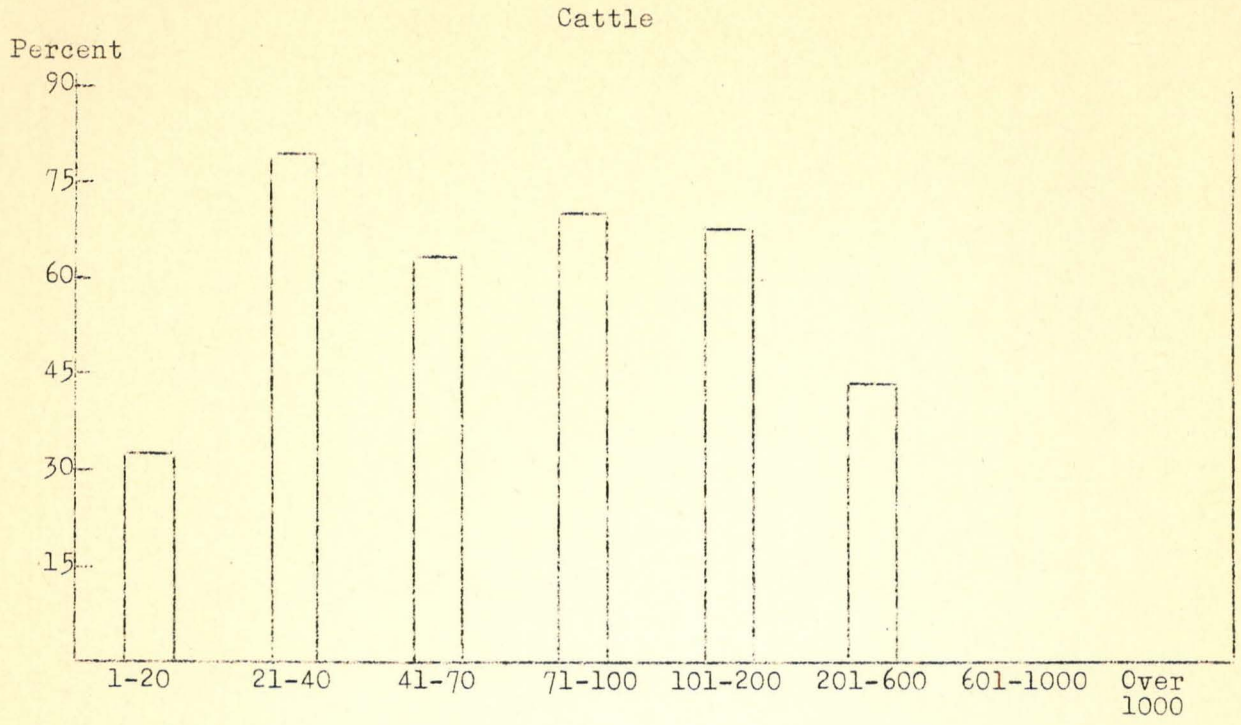


Figure 9.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Salmon National Forest.



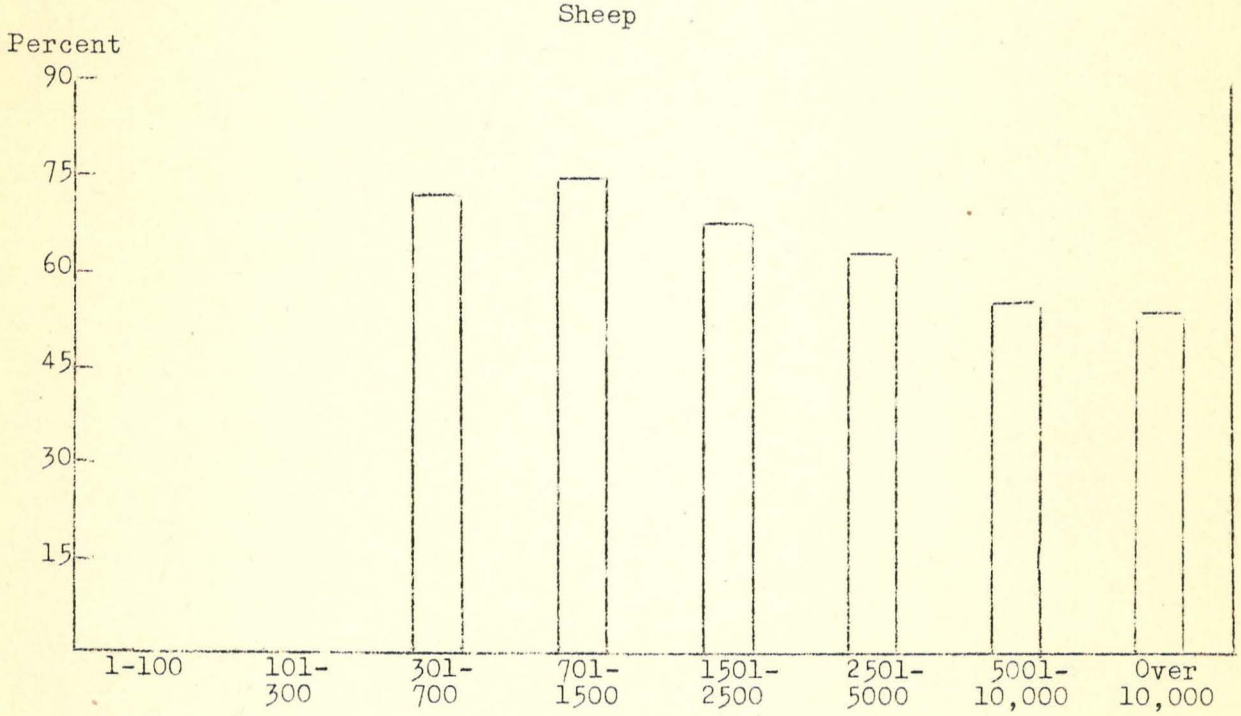
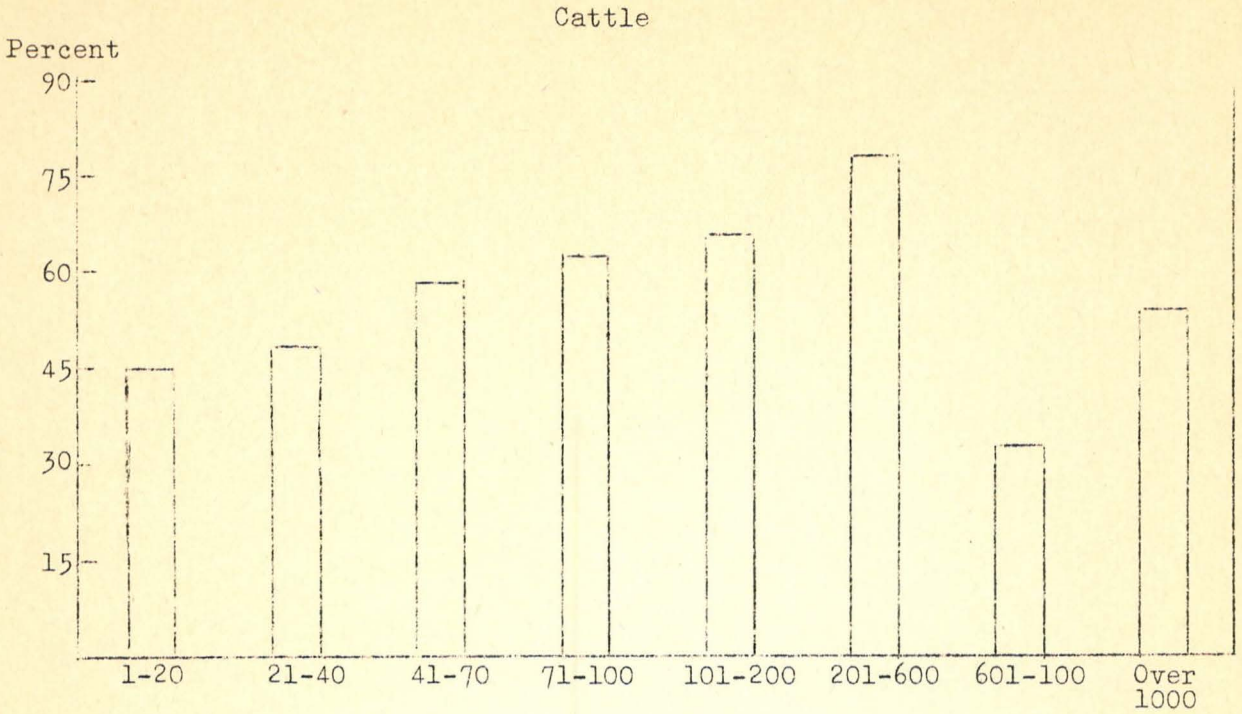


Figure 10.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Sawtooth National Forest.



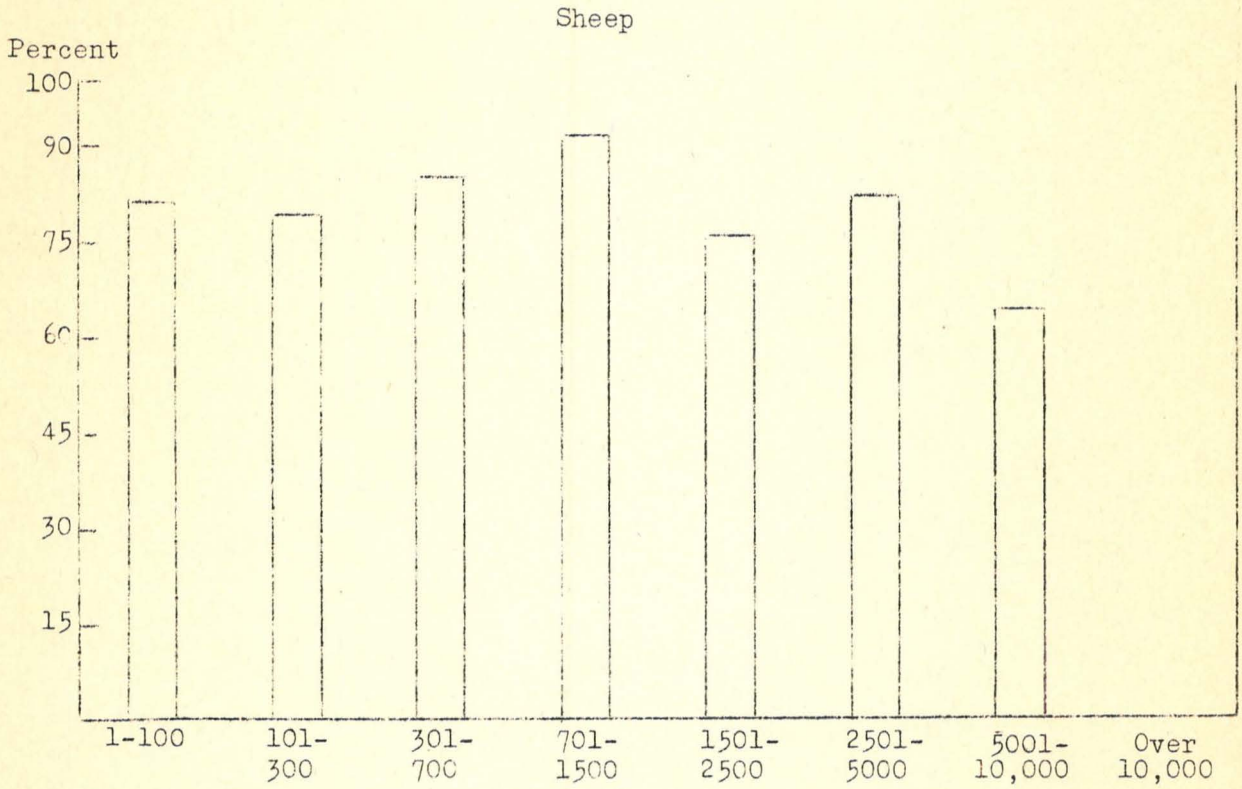


Figure 11.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Targhee National Forest.

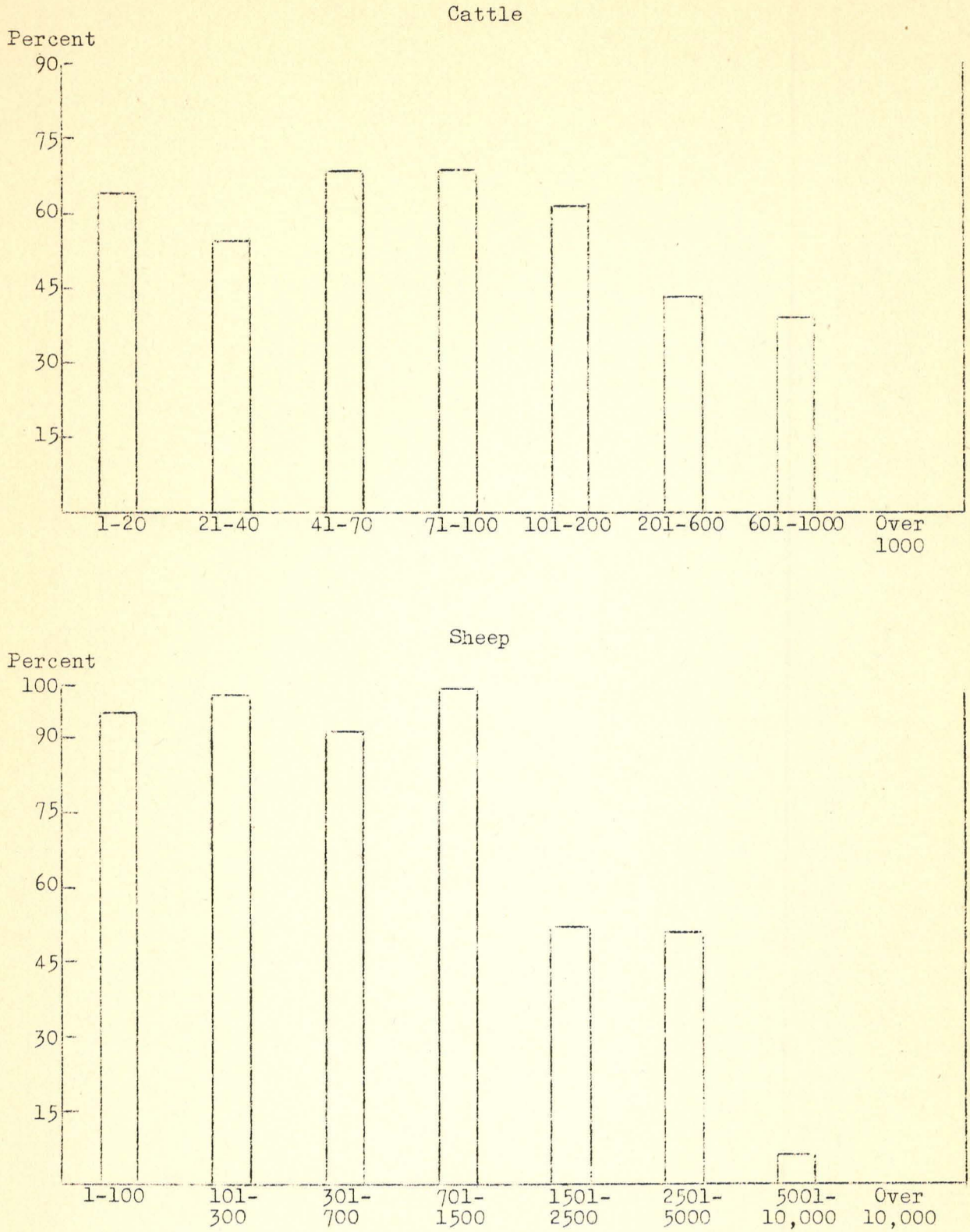
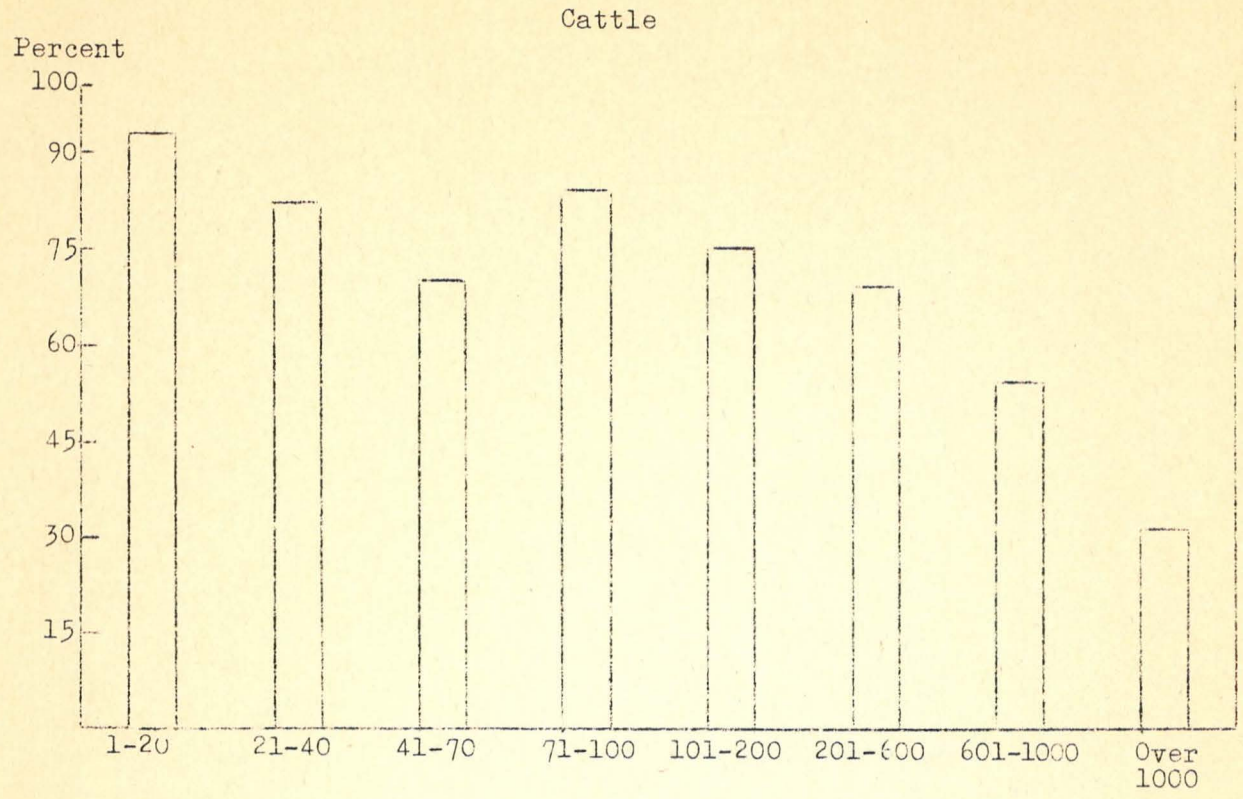


Figure 12.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Weiser National Forest.



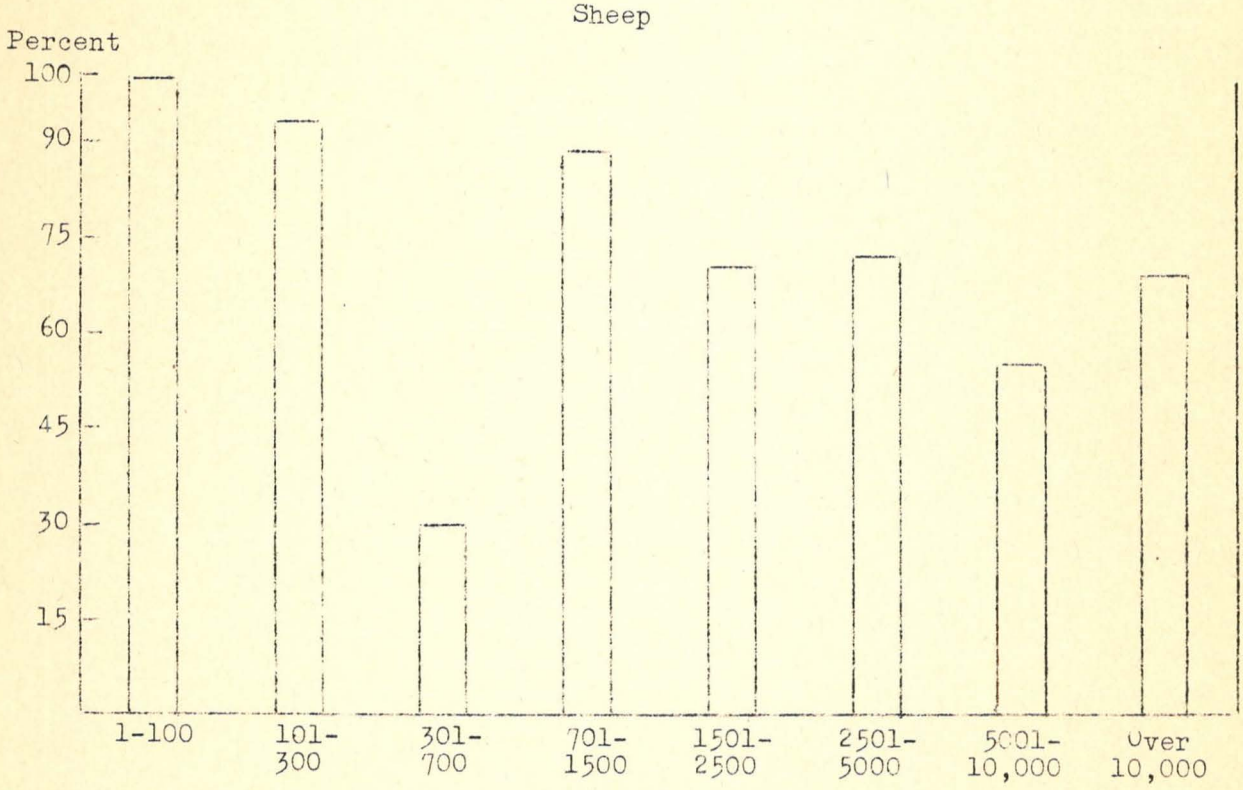
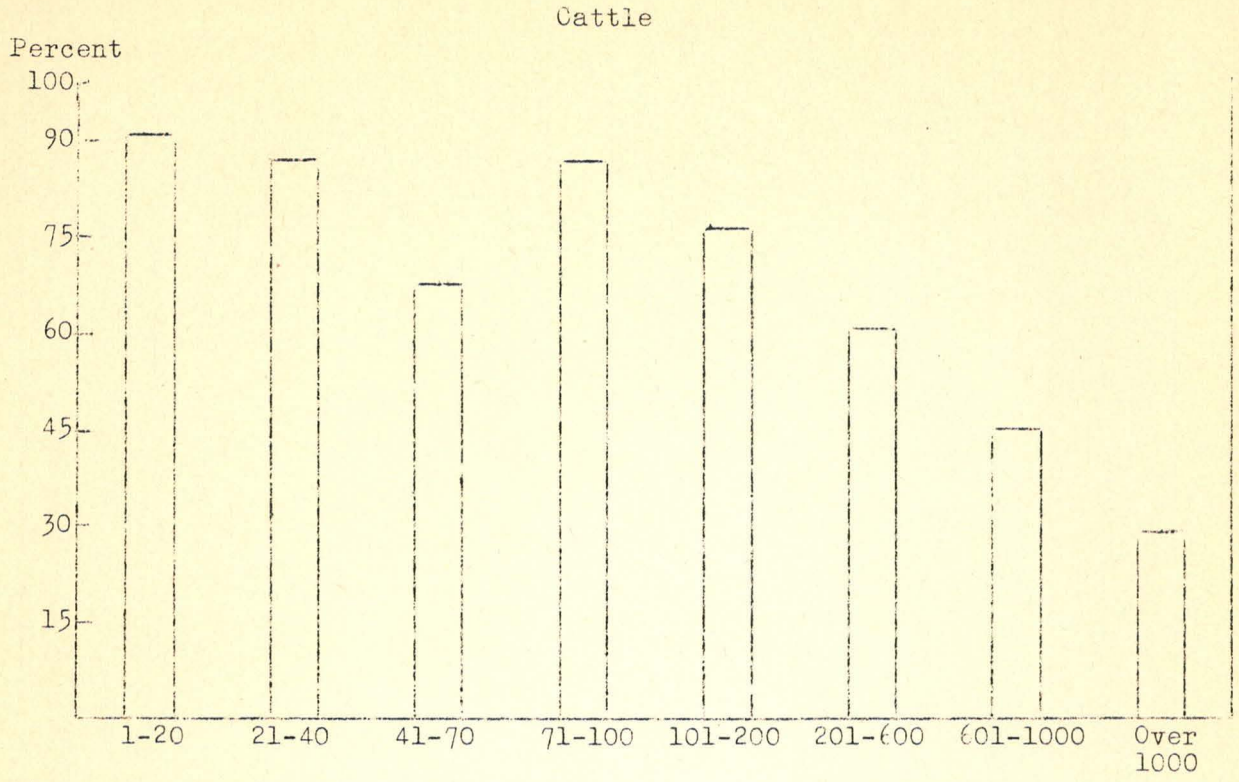


Figure 13.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the national forests of Nevada.



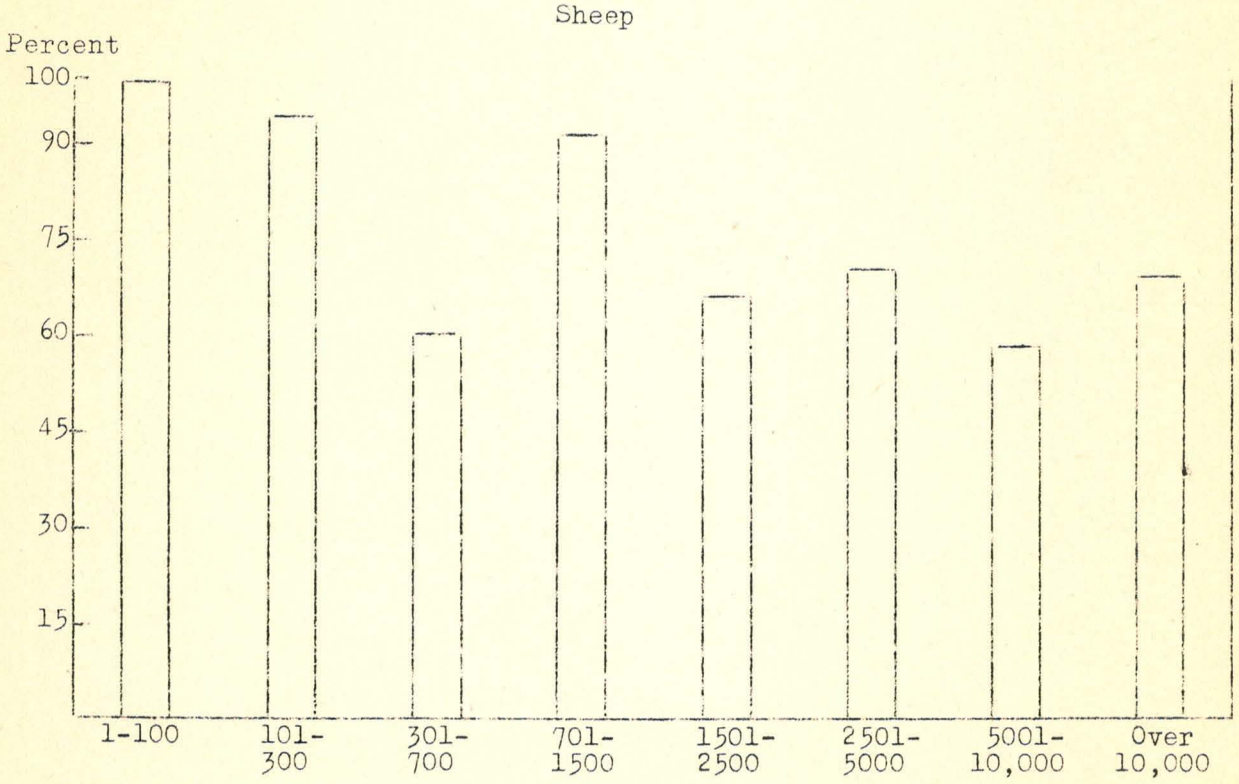
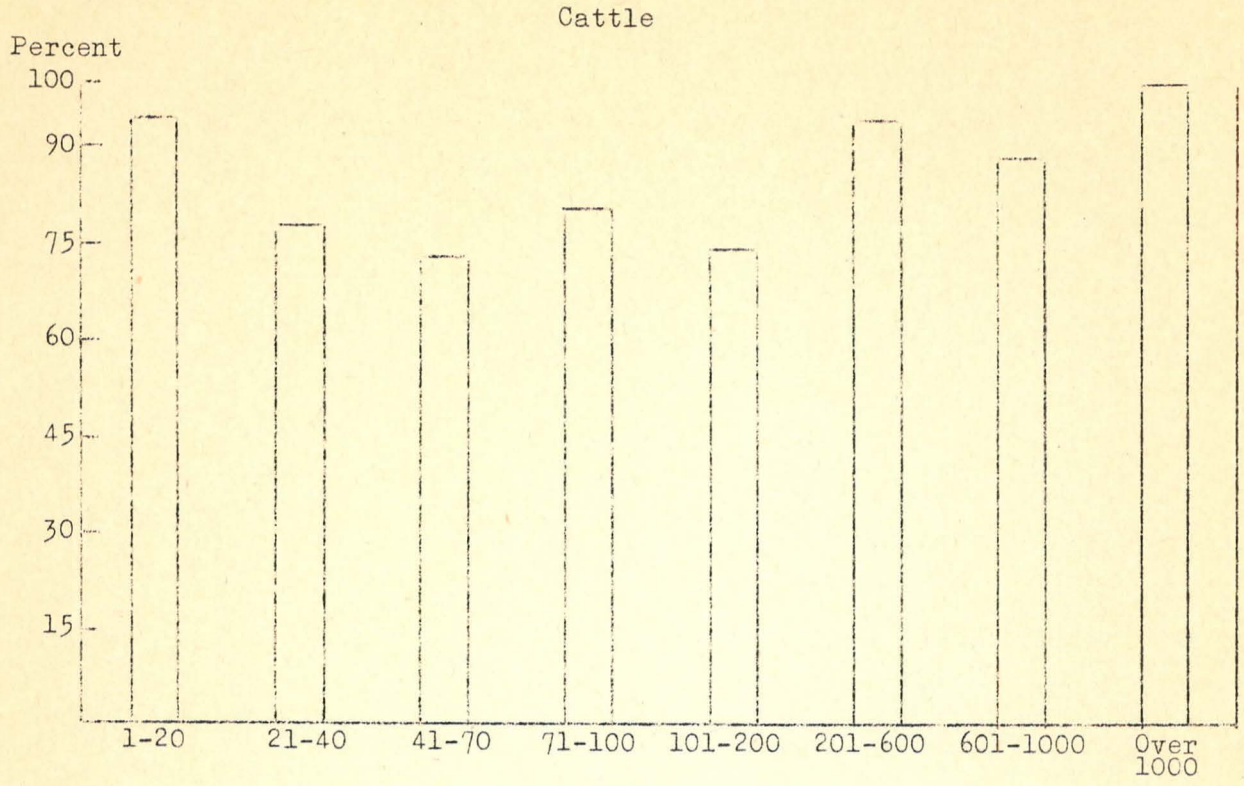


Figure 14.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Humboldt National Forest.*

*Includes part of present Toiyabe National Forest.



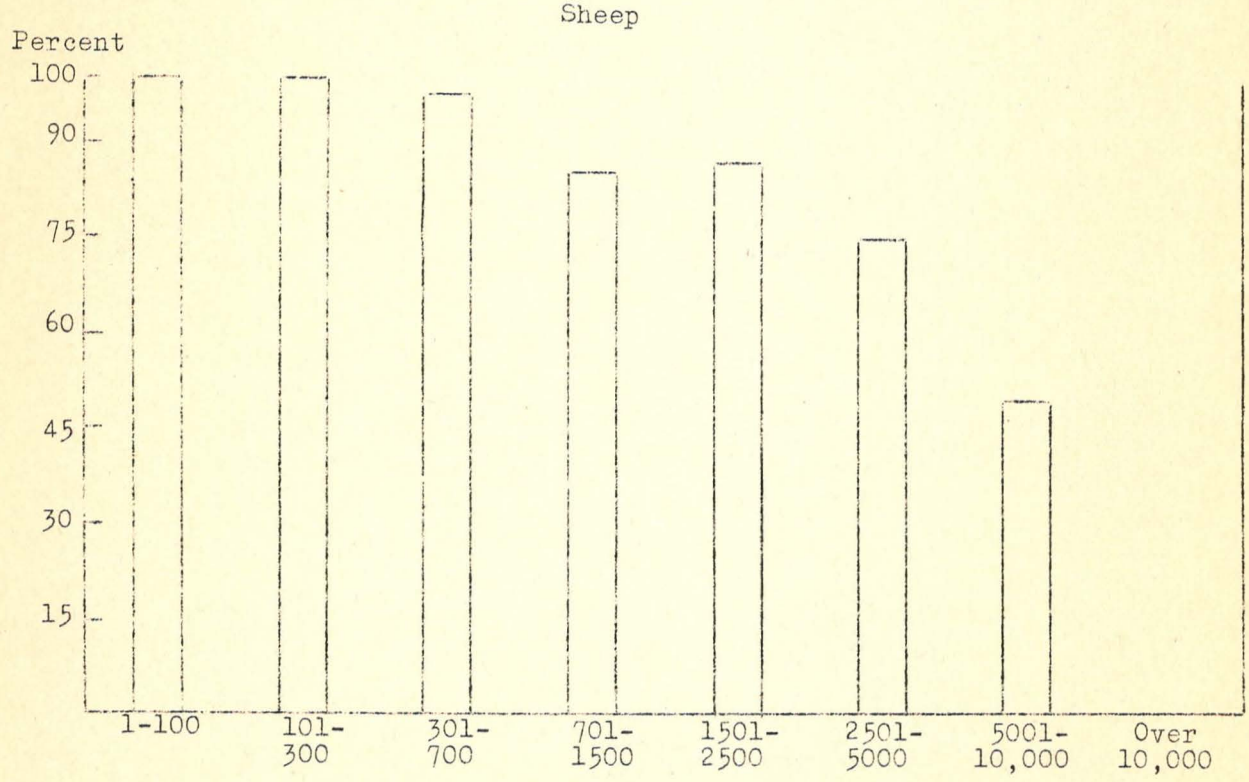


Figure 15.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Nevada National Forest.*

*Includes part of present Toiyabe National Forest.

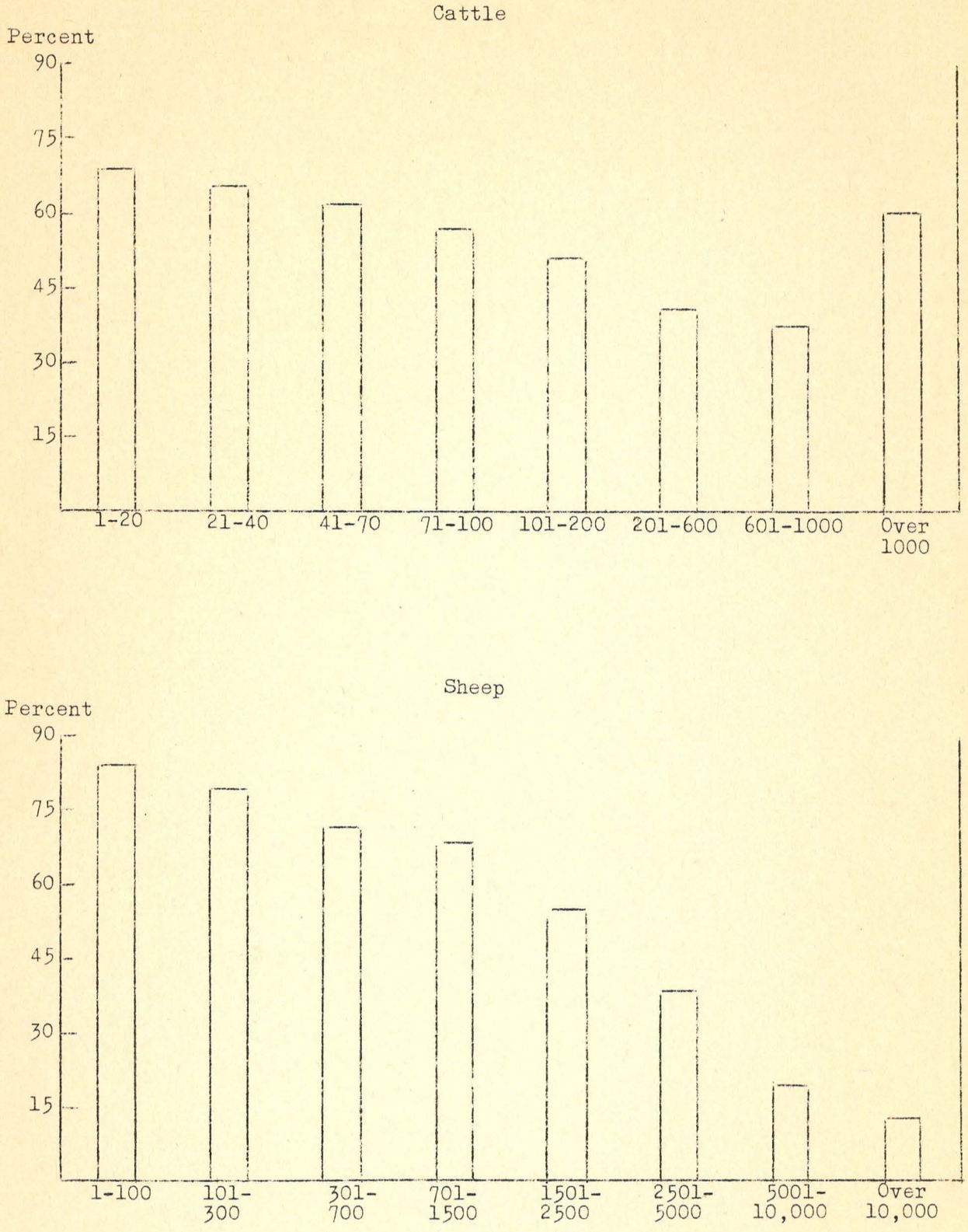
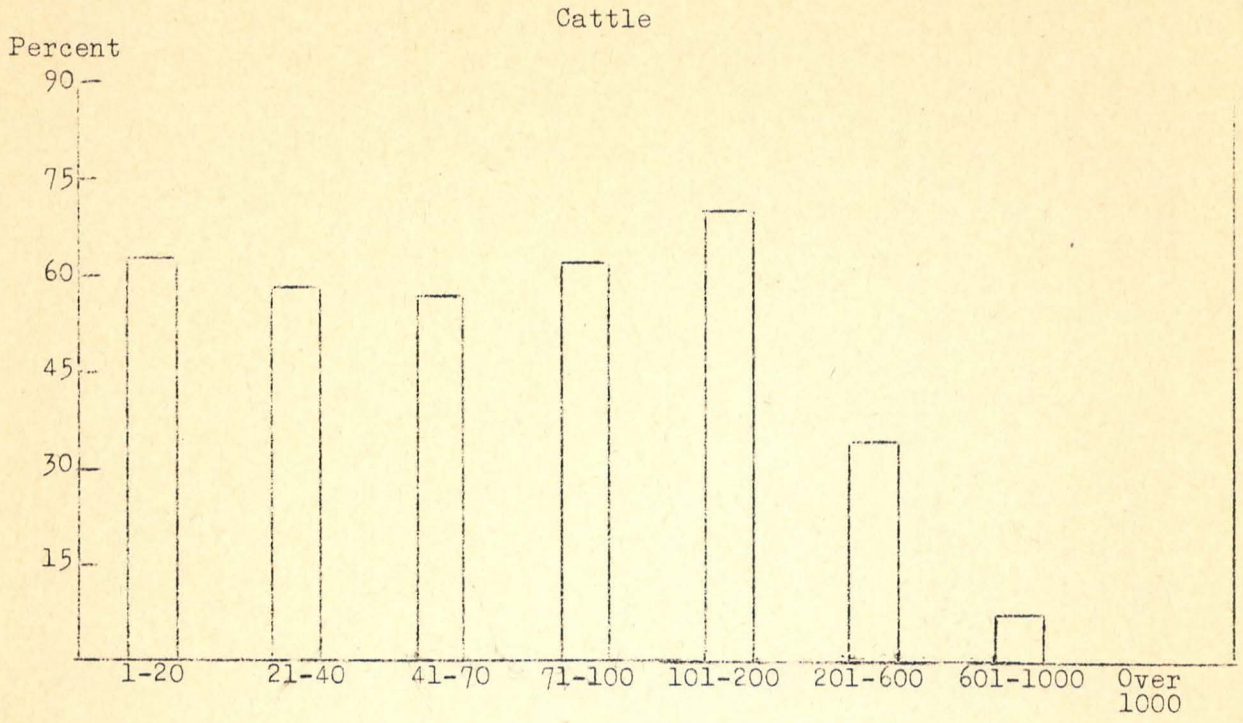


Figure 16.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the national forests of Utah.



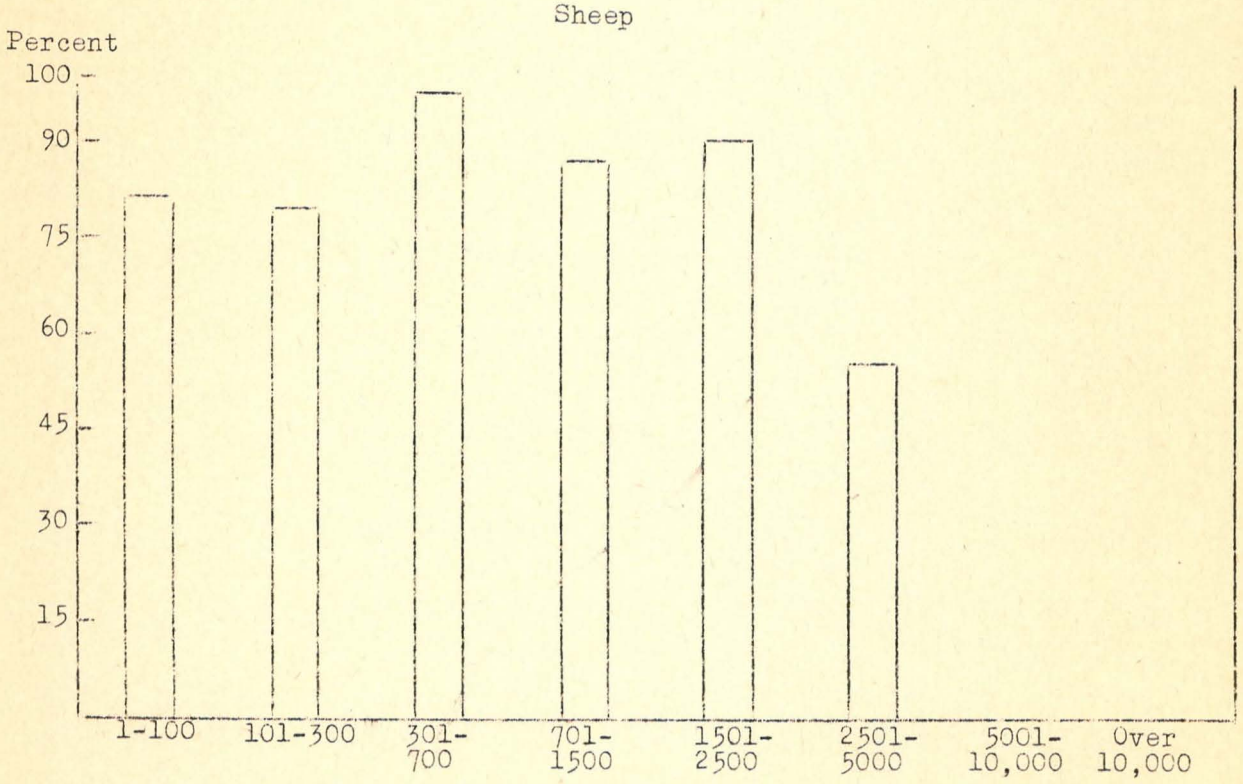
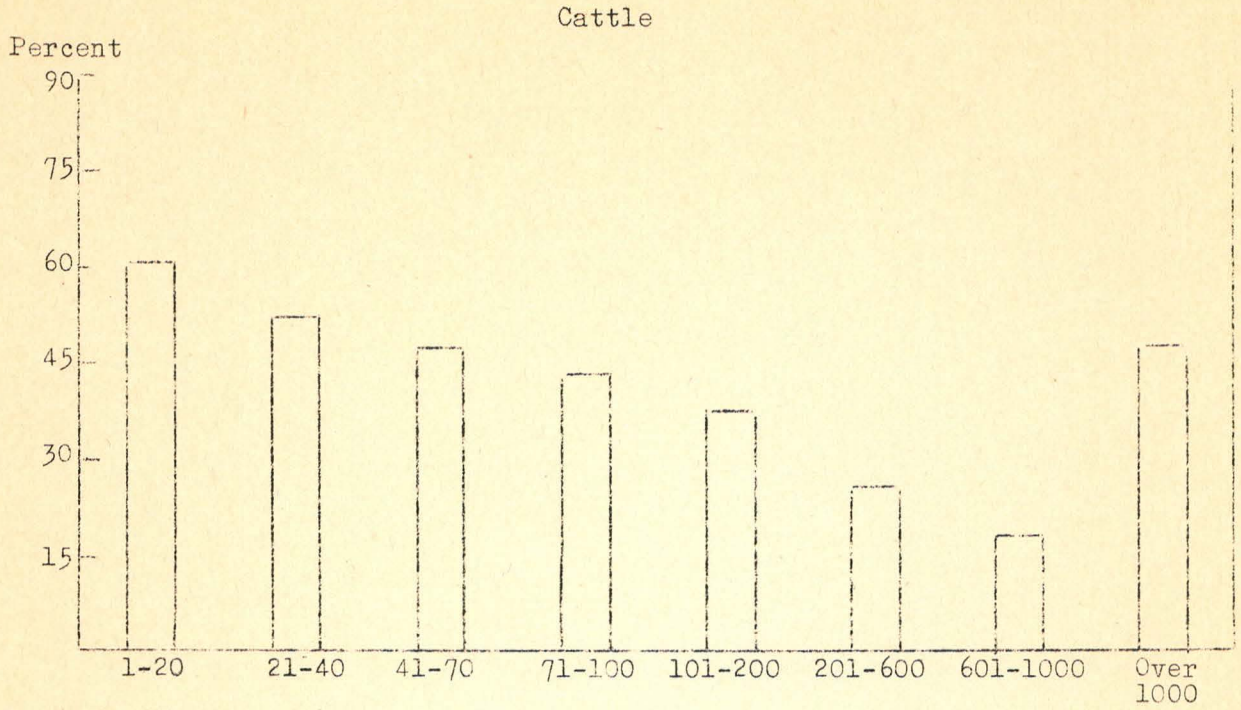


Figure 17.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Ashley National Forest.



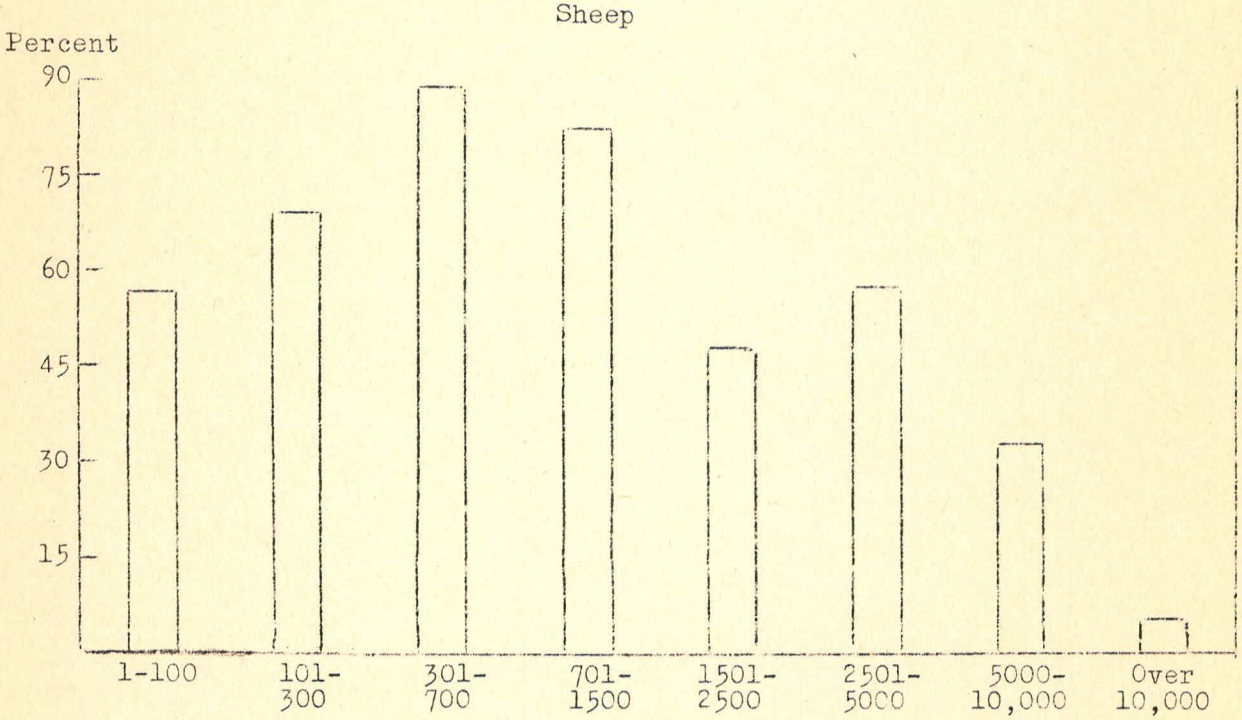


Figure 18.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Cache National Forest.

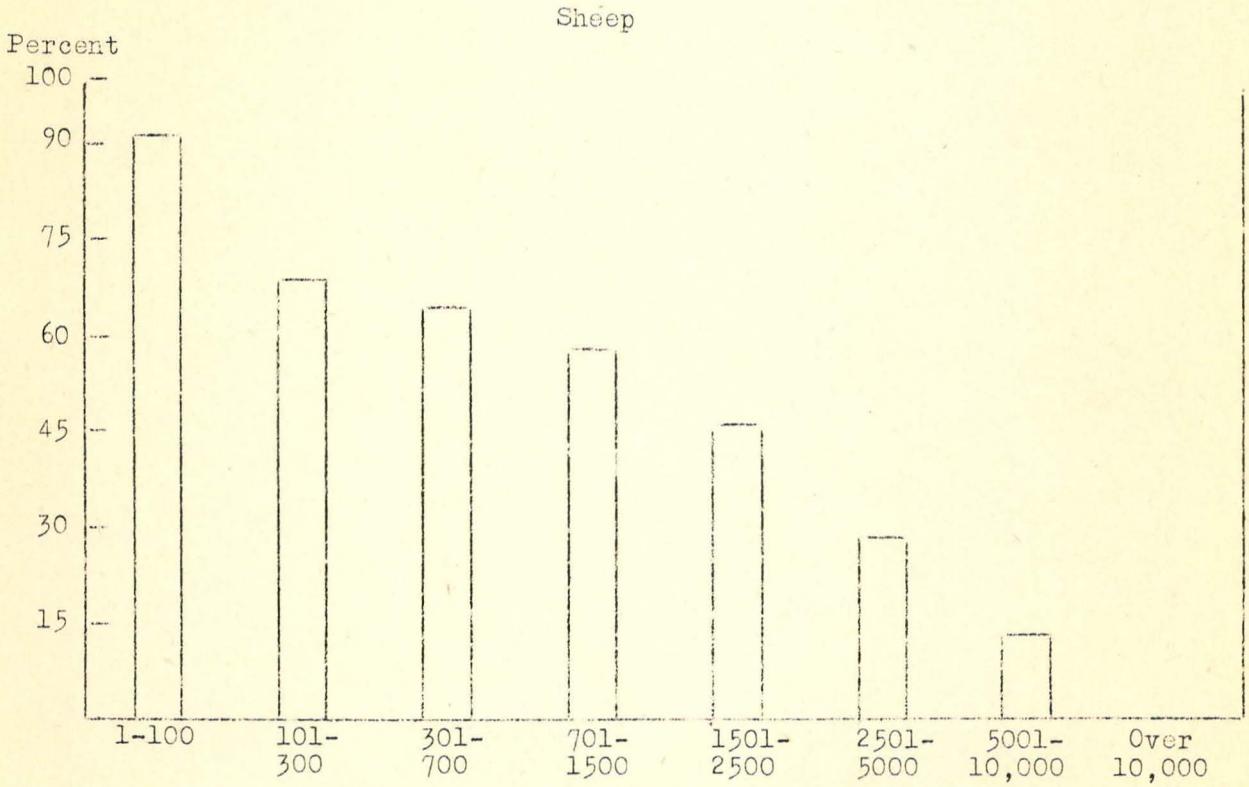
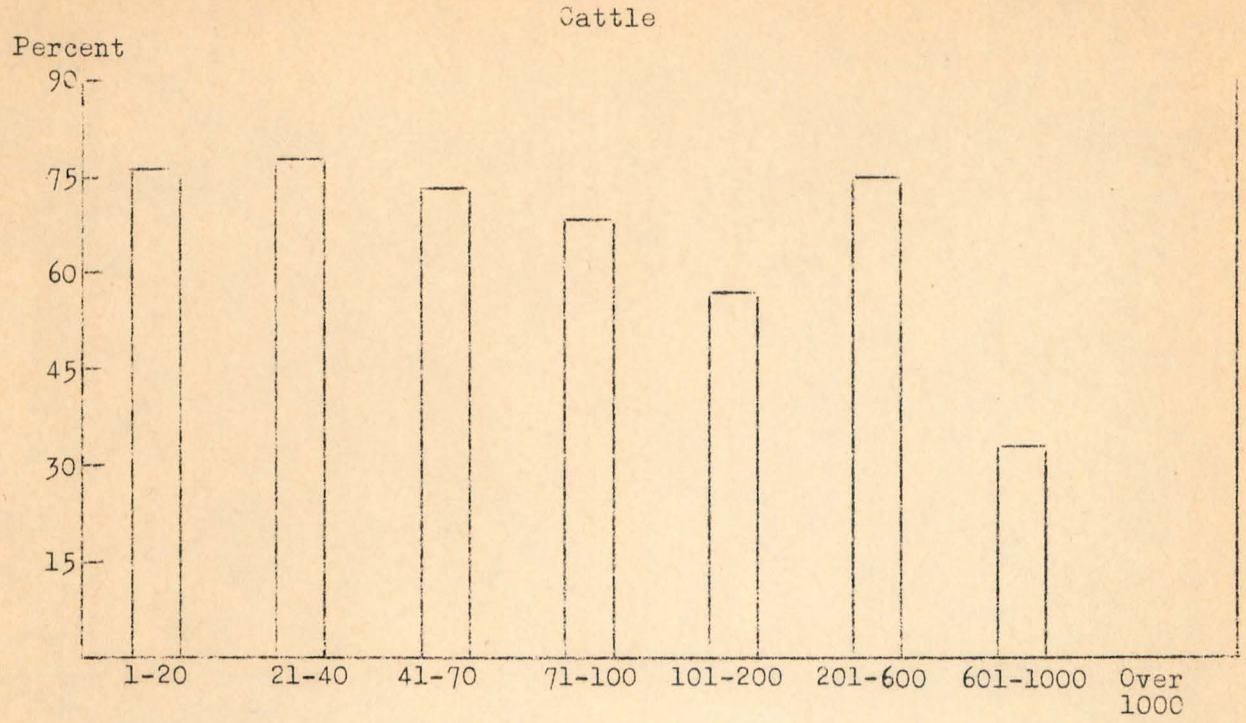


Figure 19.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Dixie National Forest.



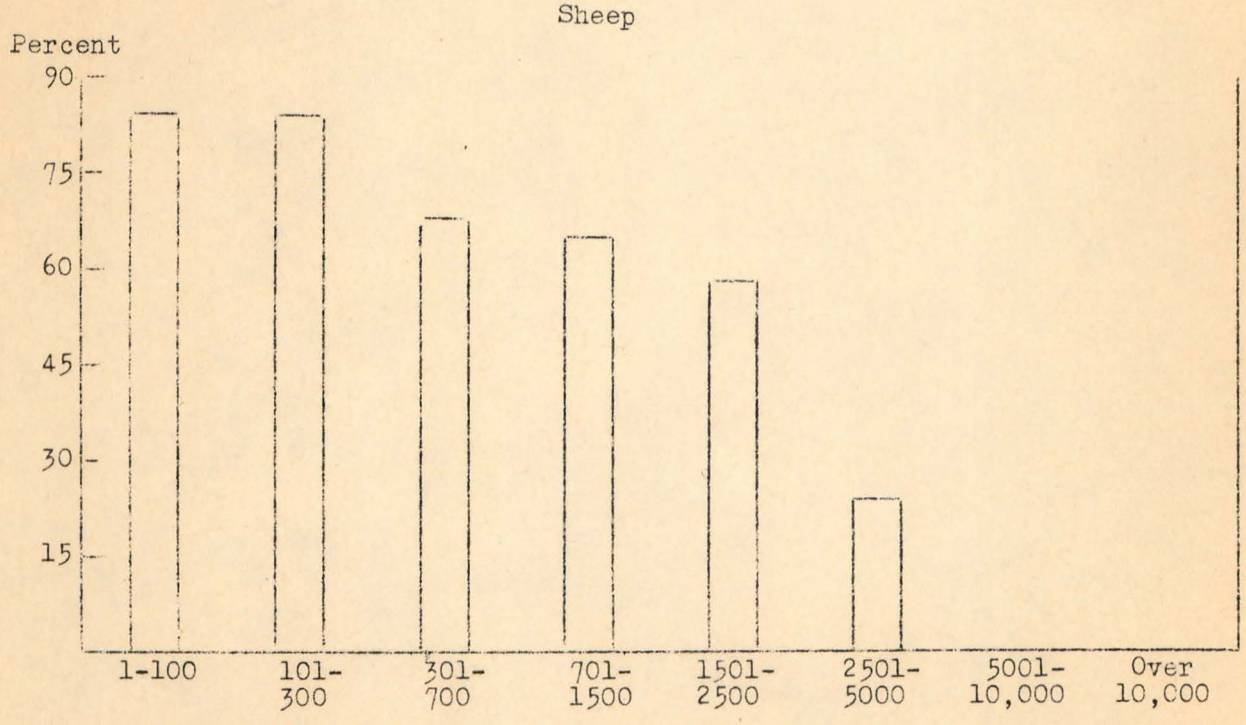


Figure 20.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Fishlake National Forest.

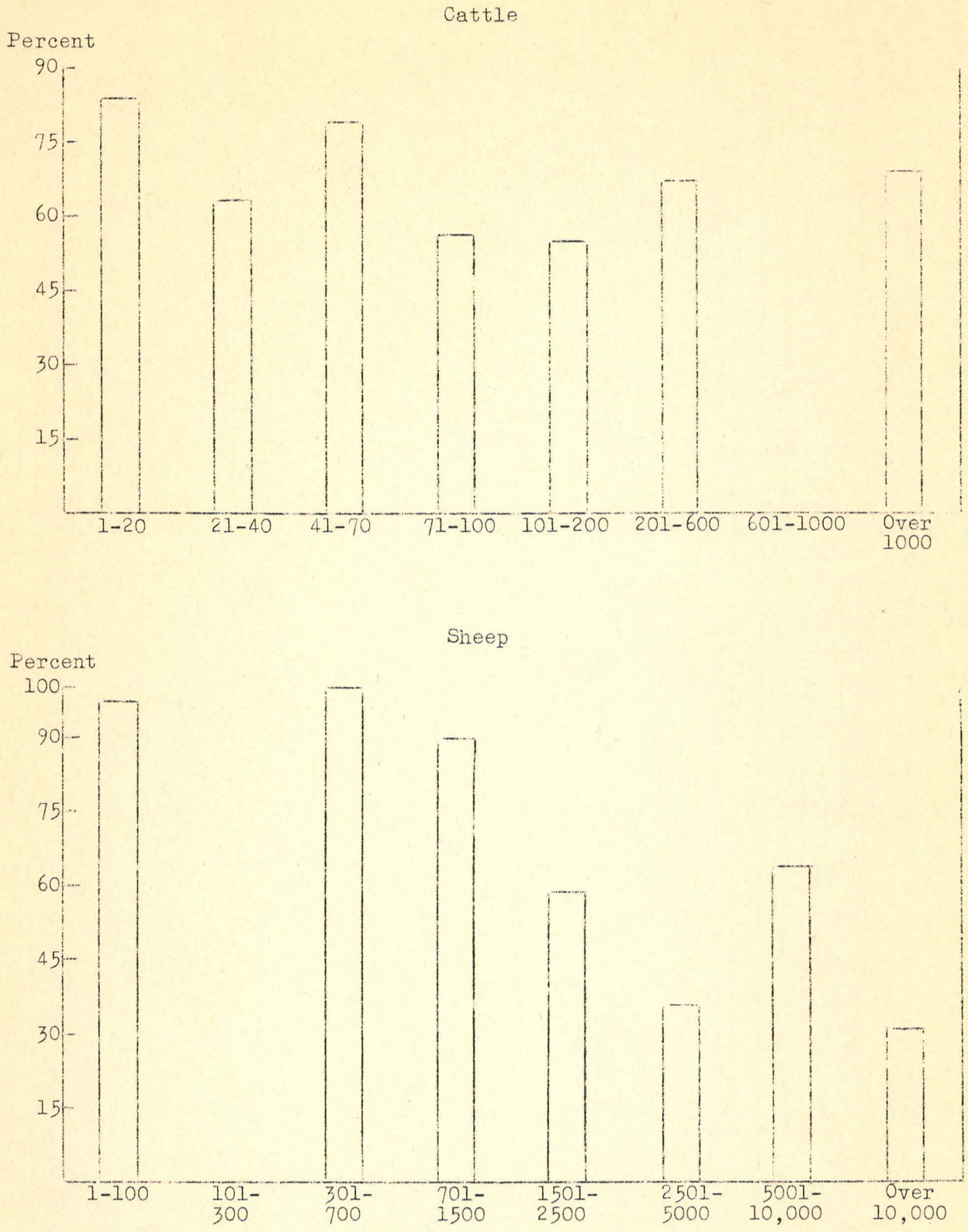


Figure 21.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the LaSal National Forest.

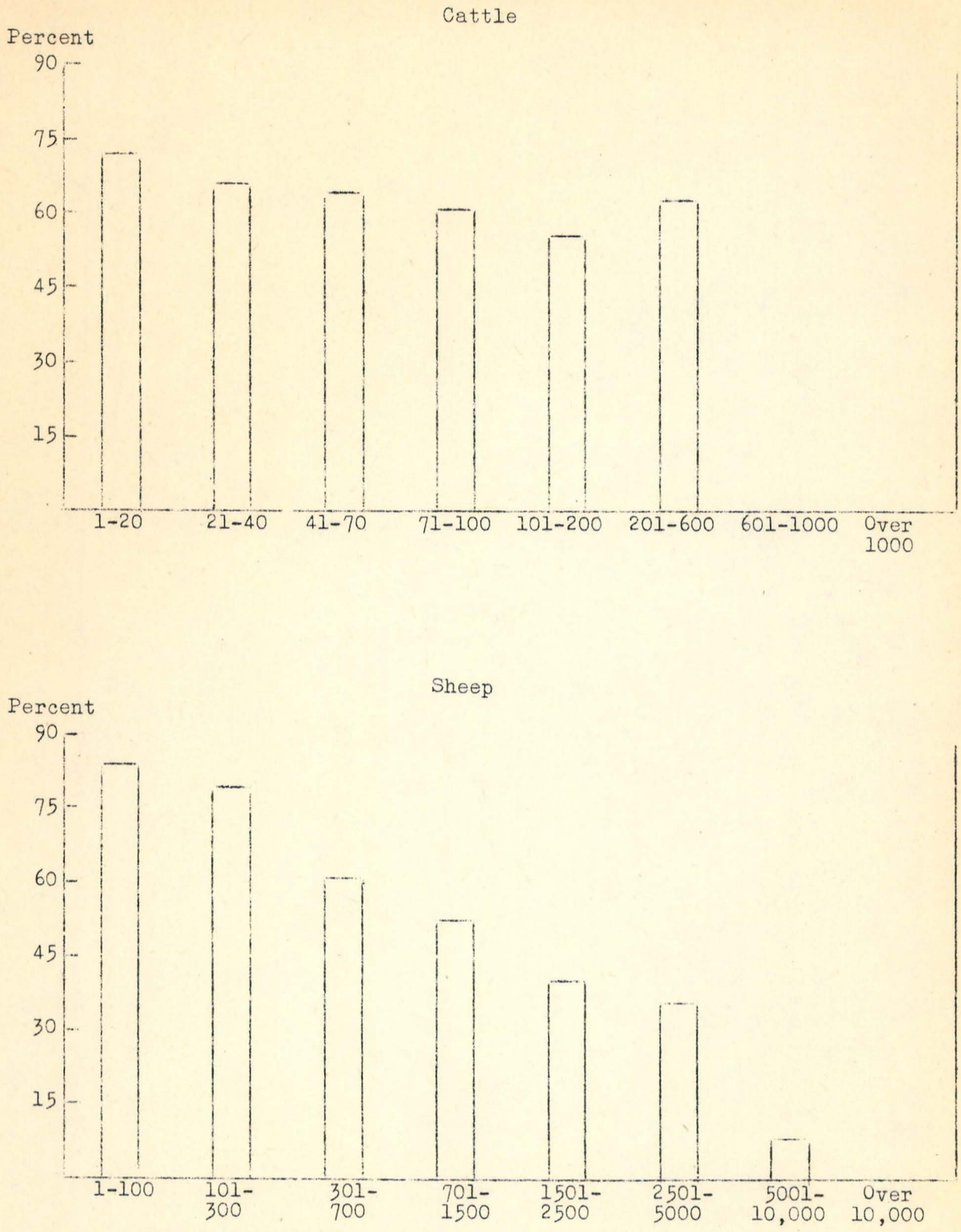
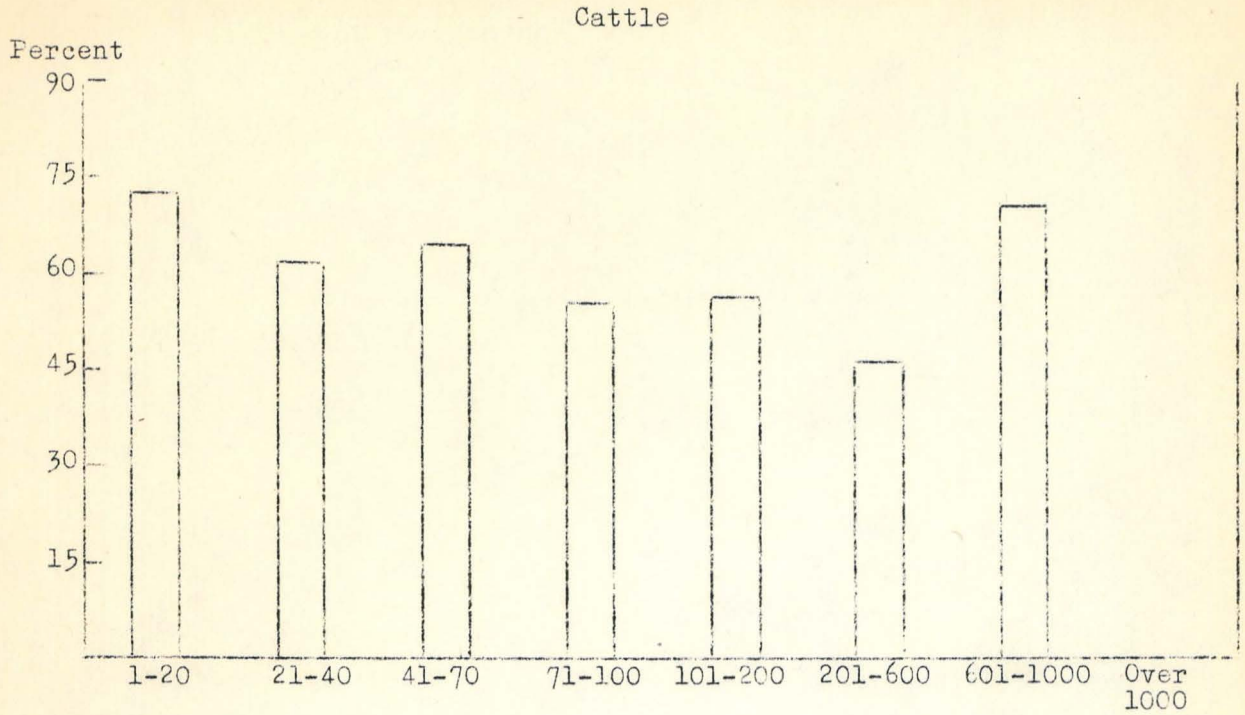


Figure 22.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Manti National Forest.



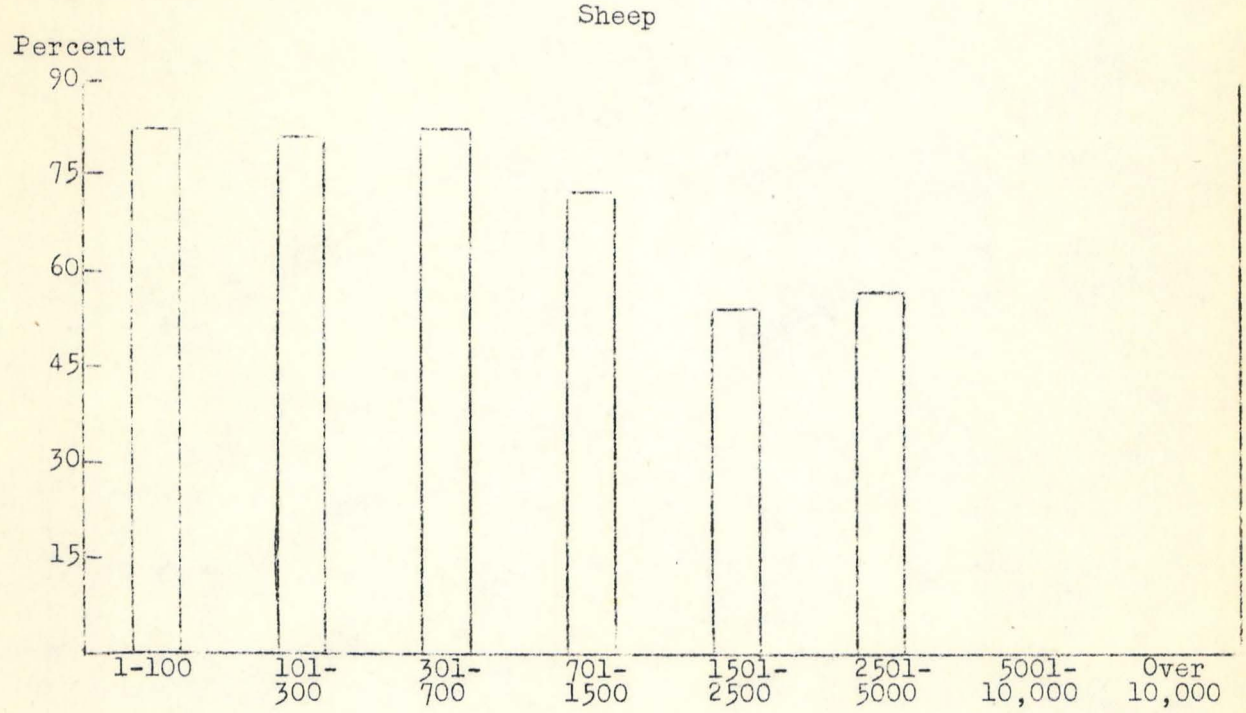
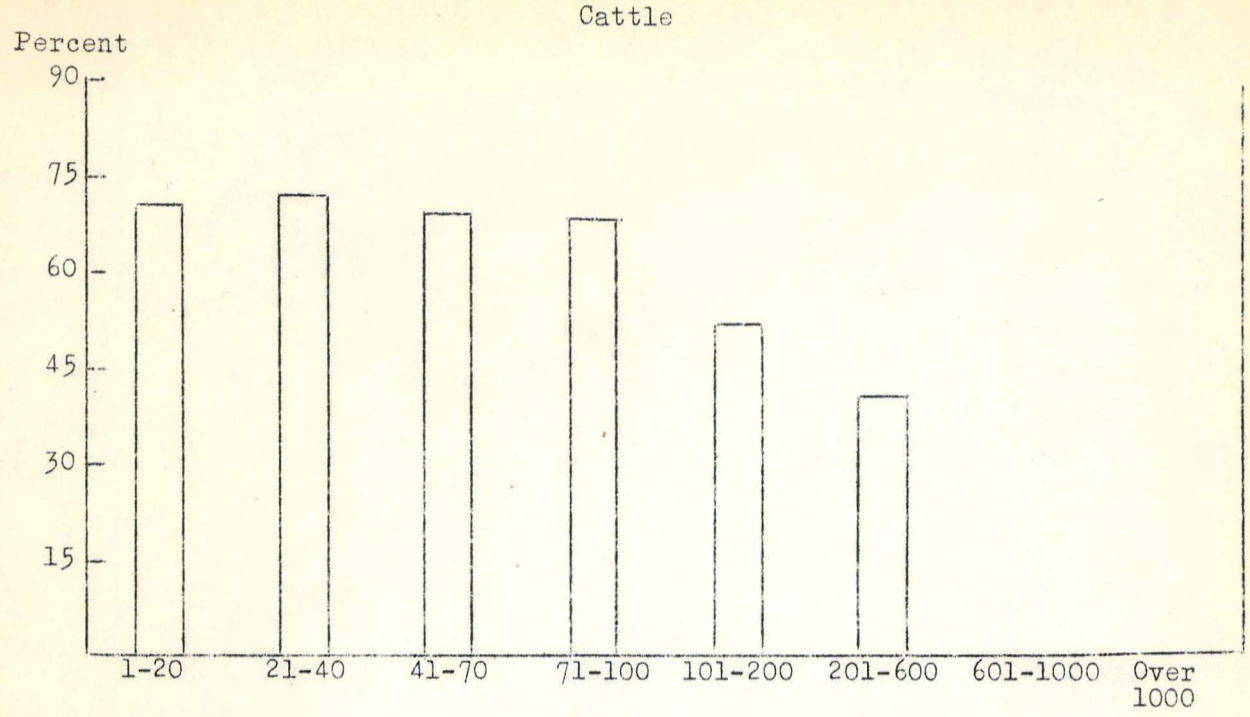


Figure 23.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Powell National Forest.



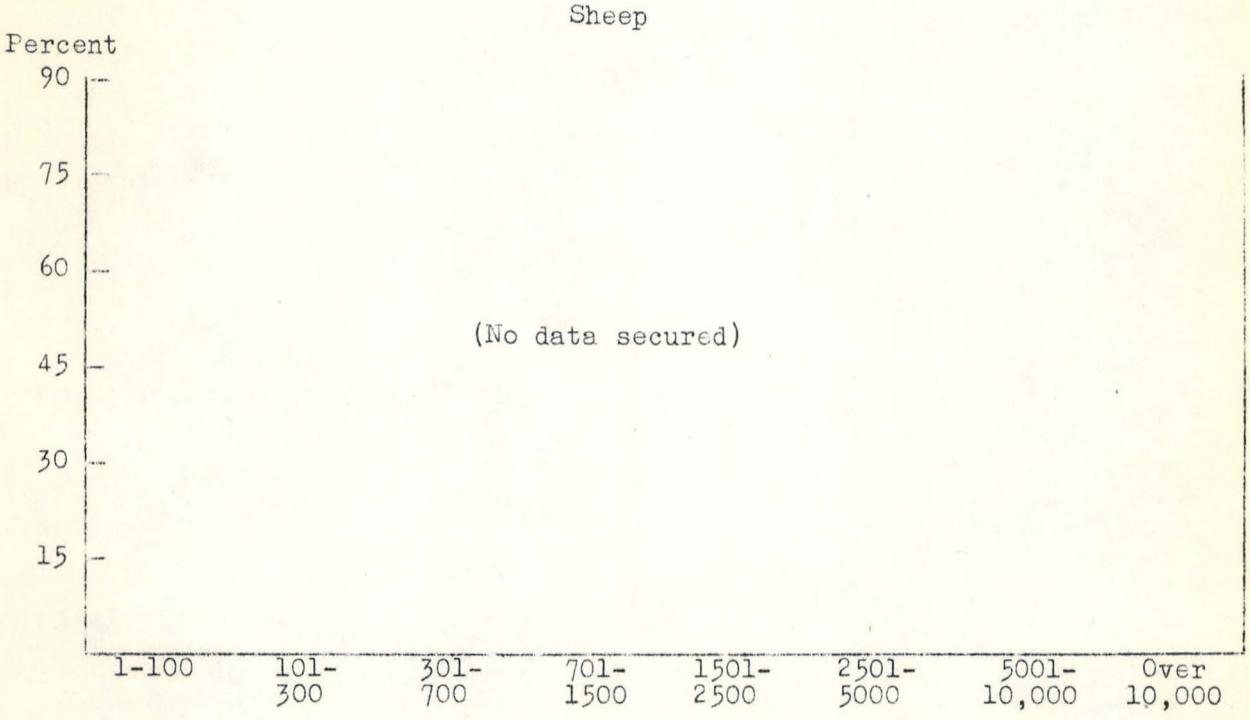
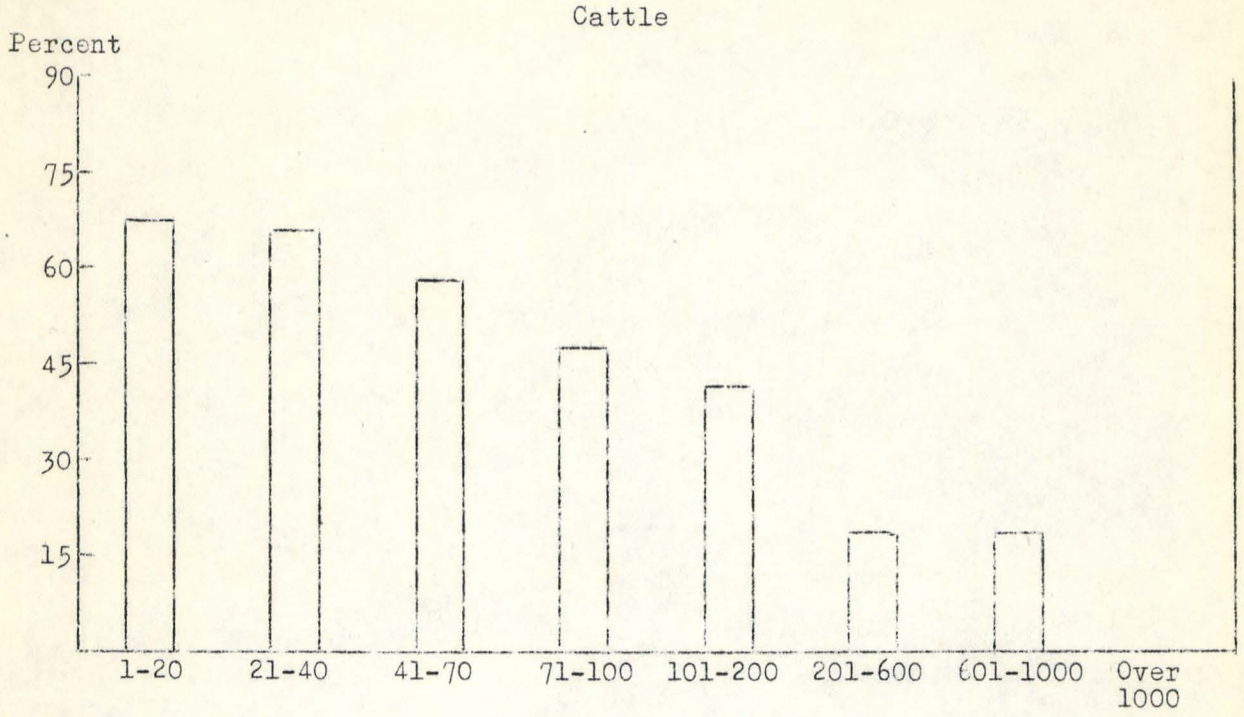


Figure 24.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Uinta National Forest.



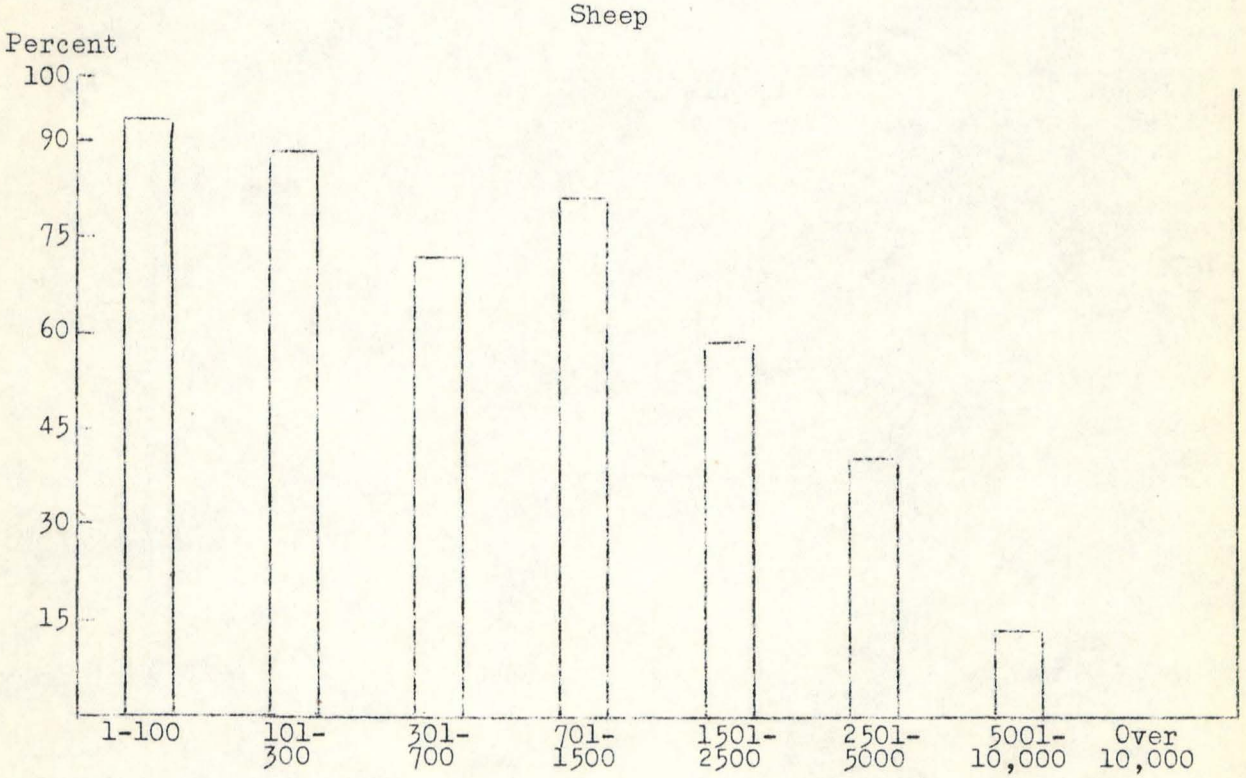


Figure 25.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Wasatch National Forest.

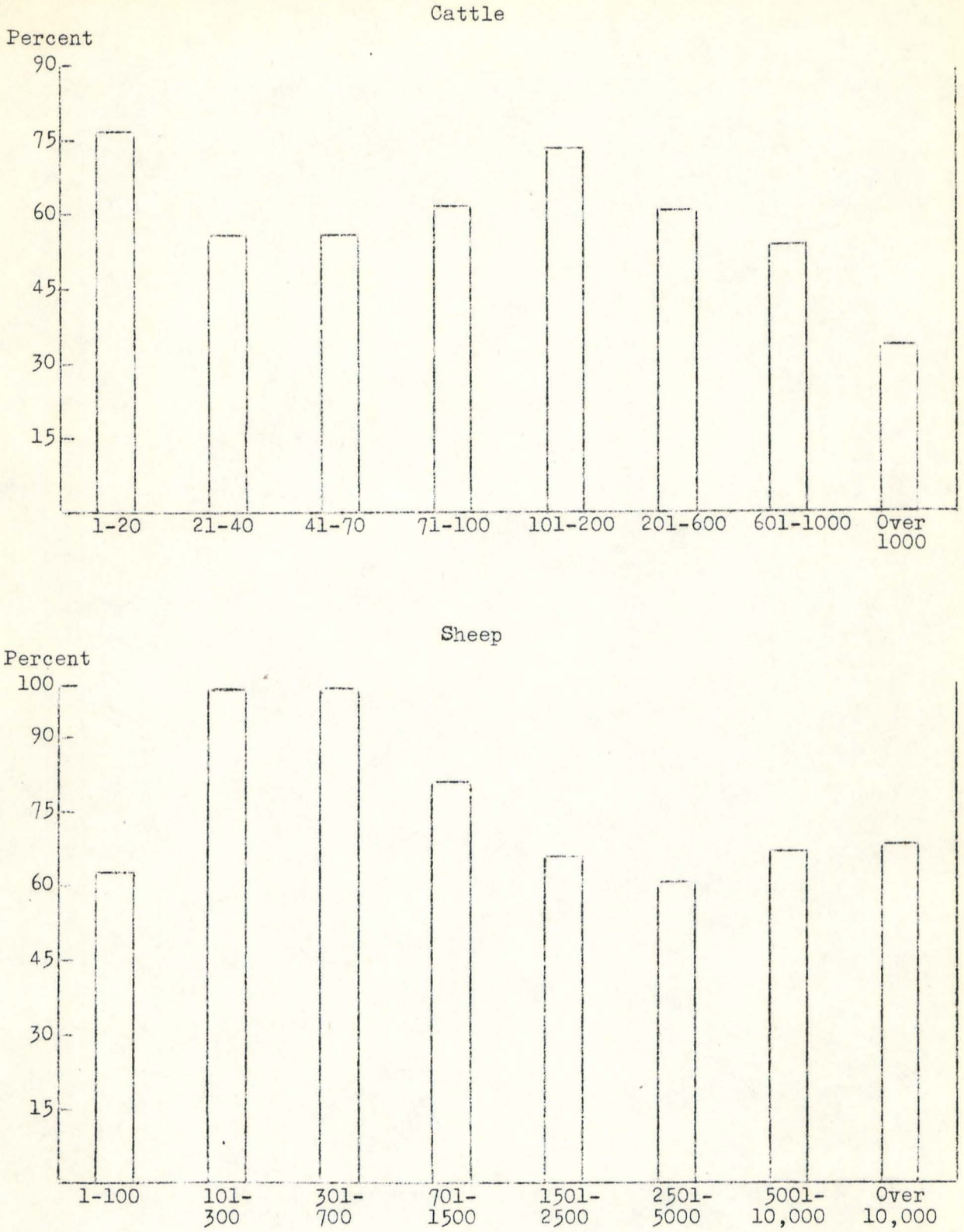
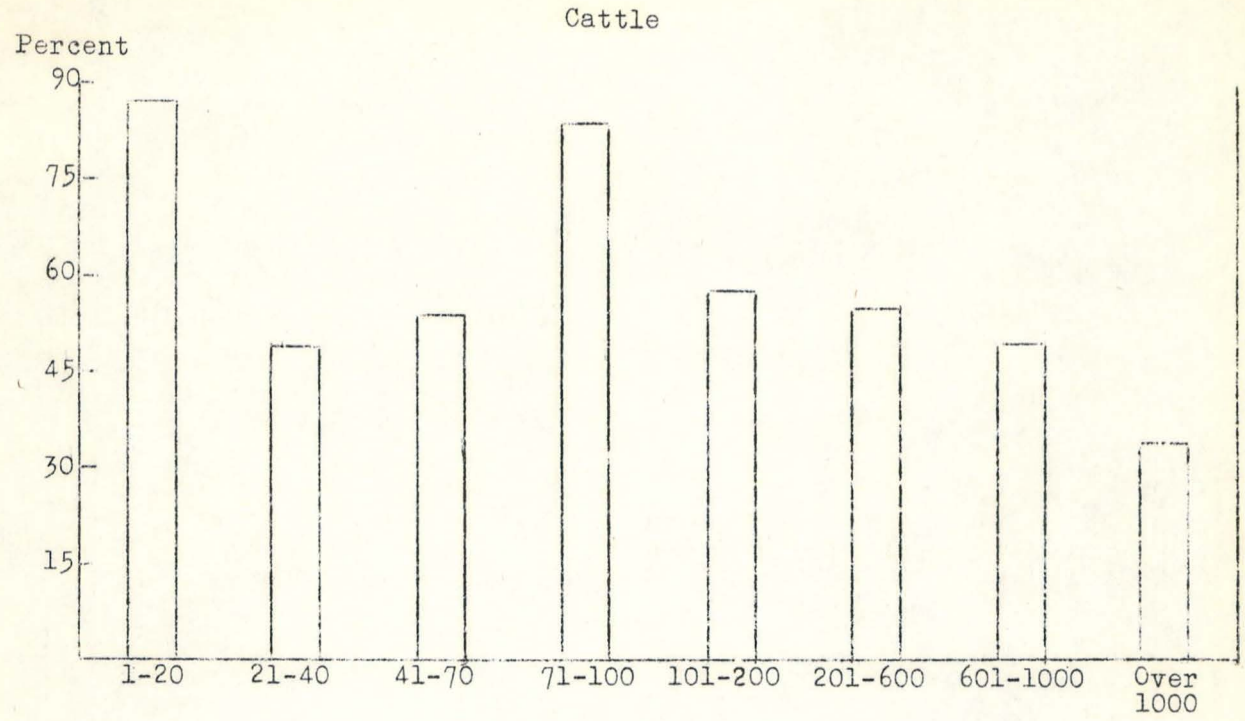


Figure 26.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the national forests of southwestern Wyoming.



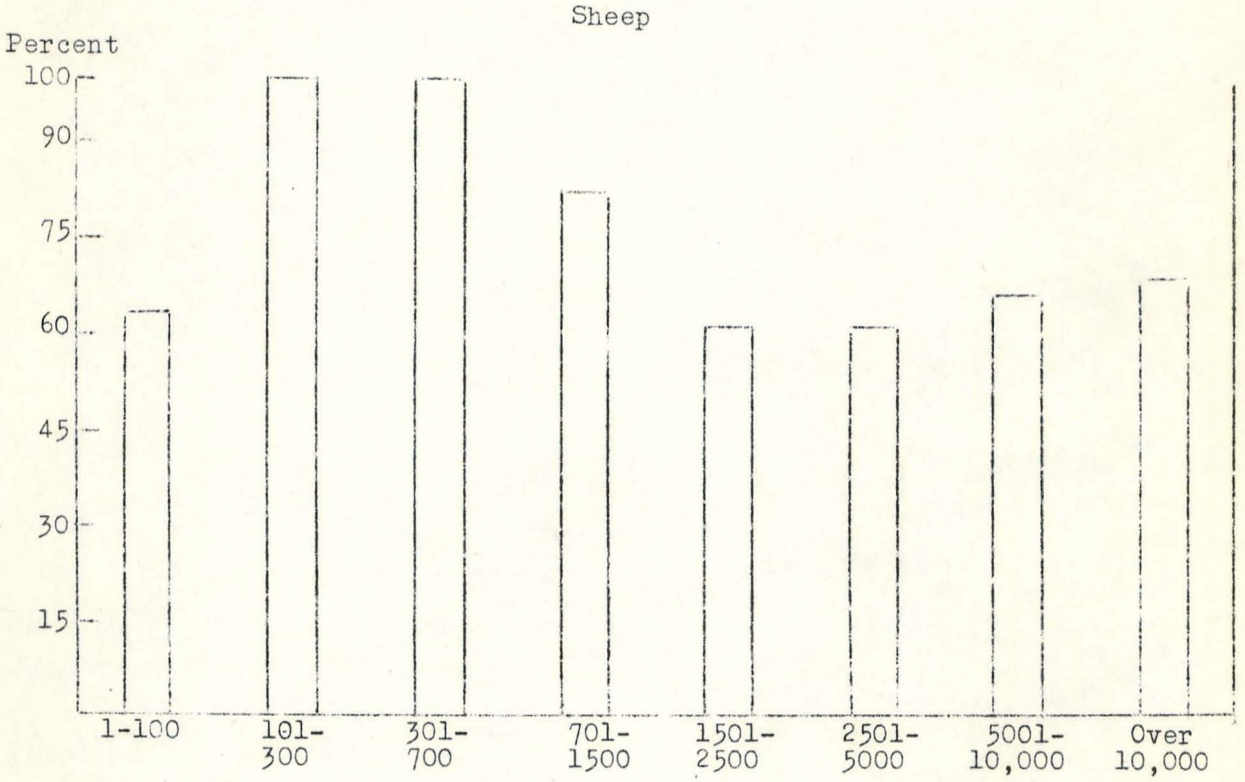
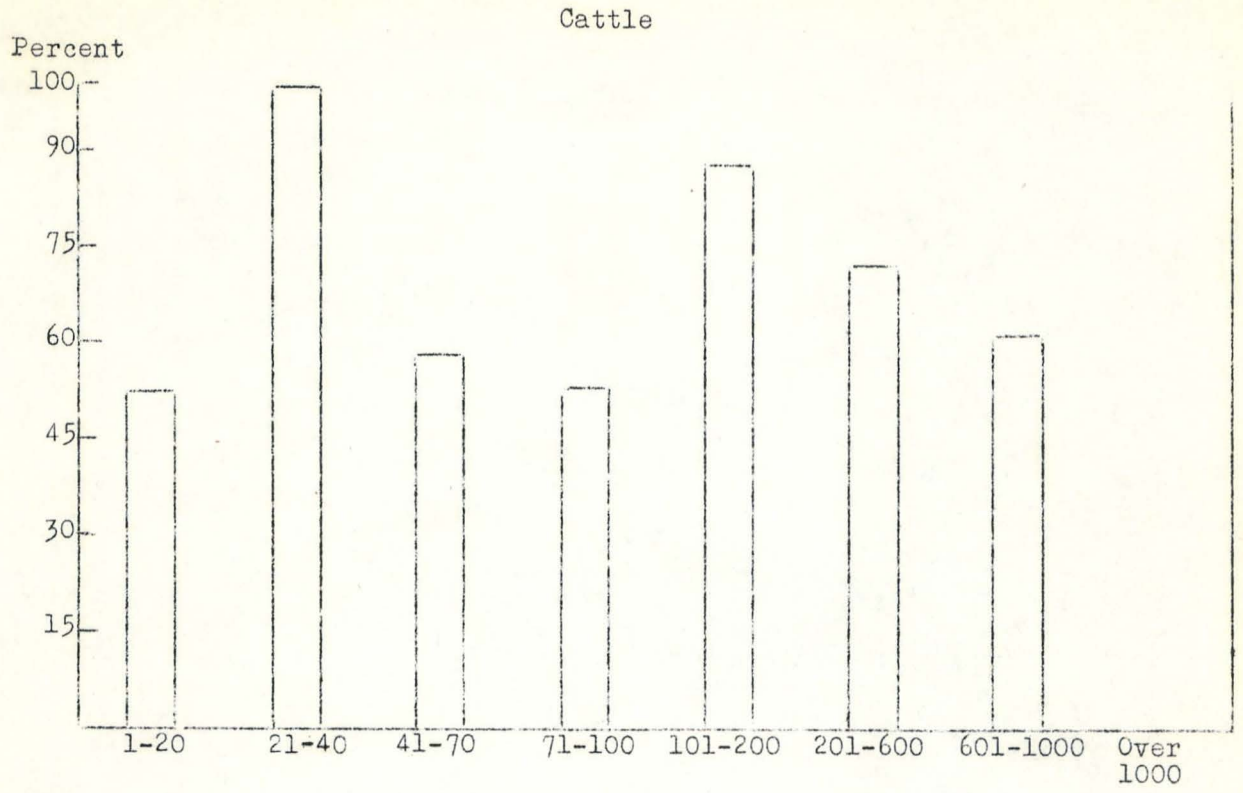


Figure 27.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Bridger National Forest.



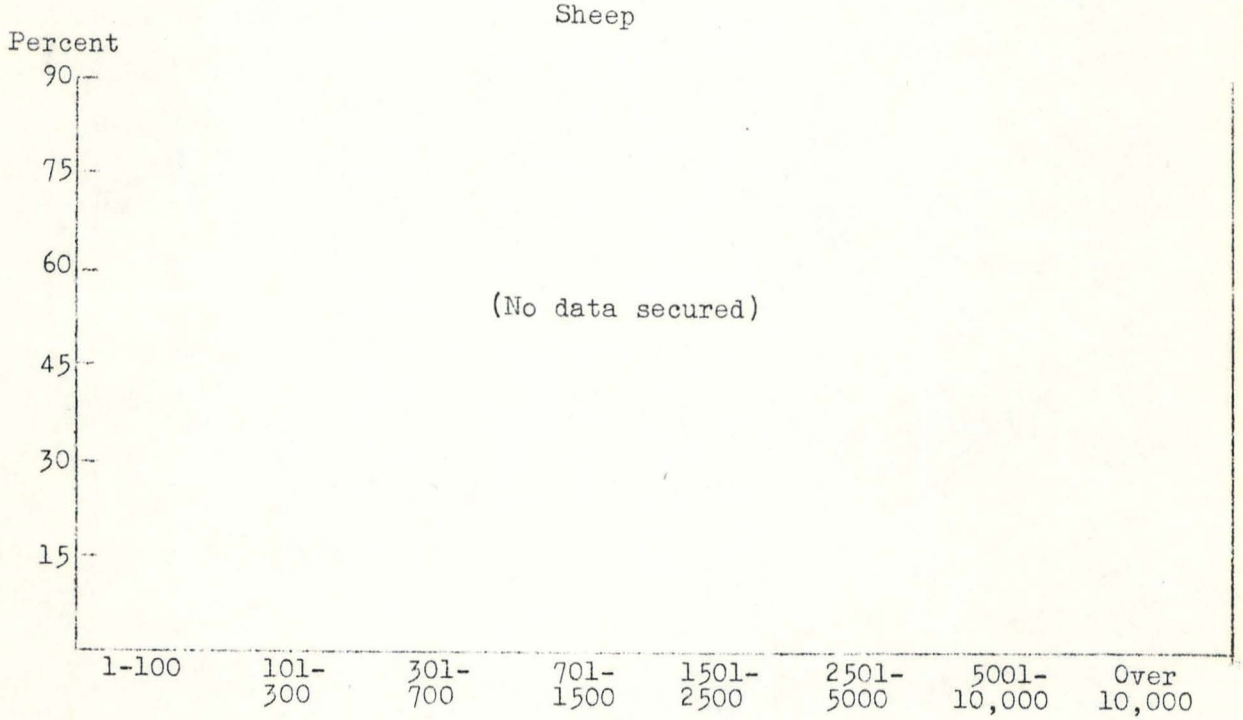
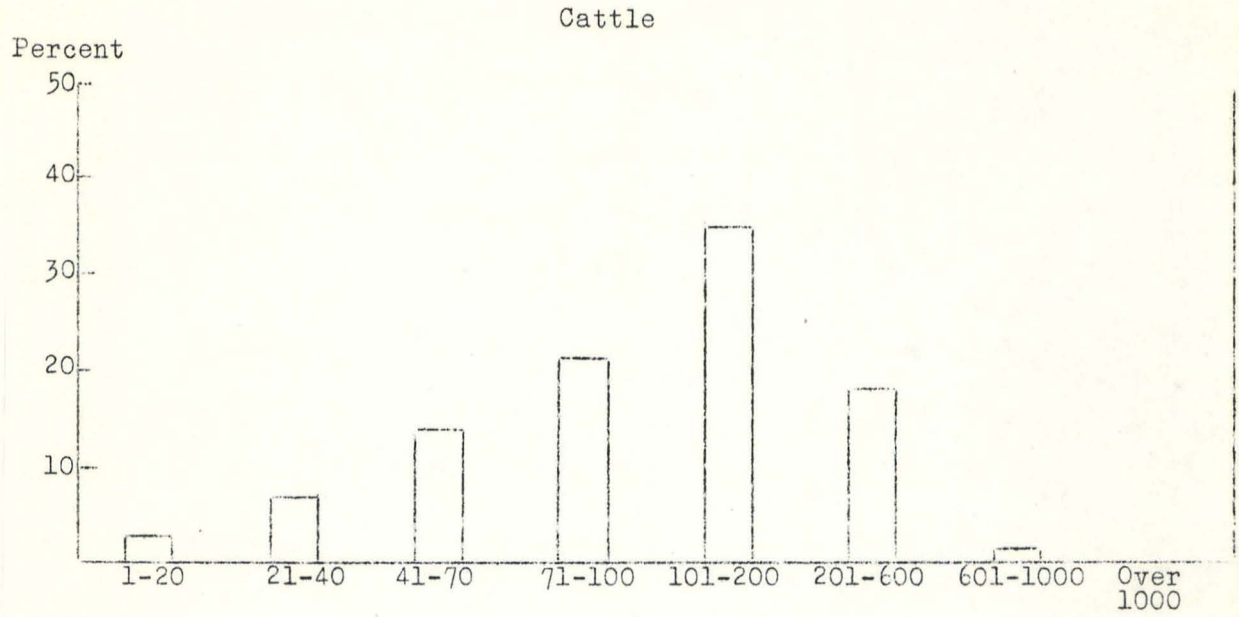


Figure 28.- The percent of the total number of cattle and sheep owned by the various size classes of forest users that are permitted to graze on the Teton National Forest.

The following set of graphs show the percent of the total cattle or sheep use on the national forests and grazing districts that is absorbed by the various size classes of livestock enterprises. These data are arranged by states, the grazing district data following the national forest graphs in each state.

In studying these graphs the reader will note that there are fairly definite modal groups. For example, the size class of cattle securing most of the range use in this region is the 201-600 head class. This is significant since it is generally considered that this spread includes most of the medium and large family-sized cattle ranch operations. A comparison of data from the grazing districts and national forests show that more of the grazing is used by larger enterprises on the grazing districts than on the national forests.



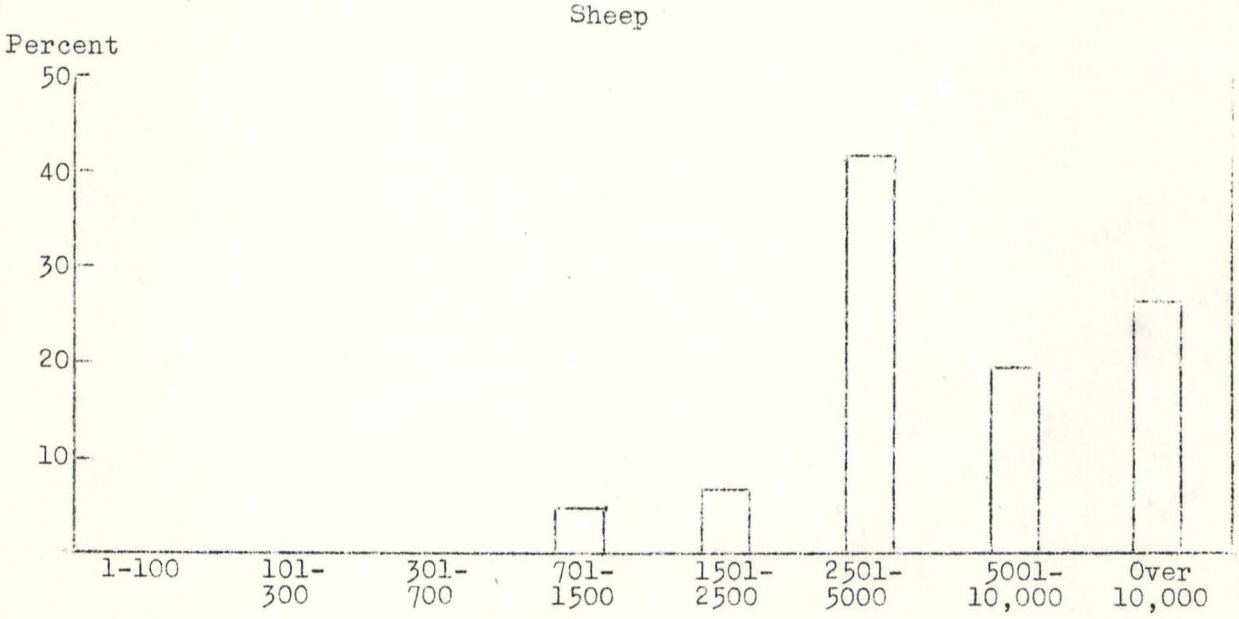
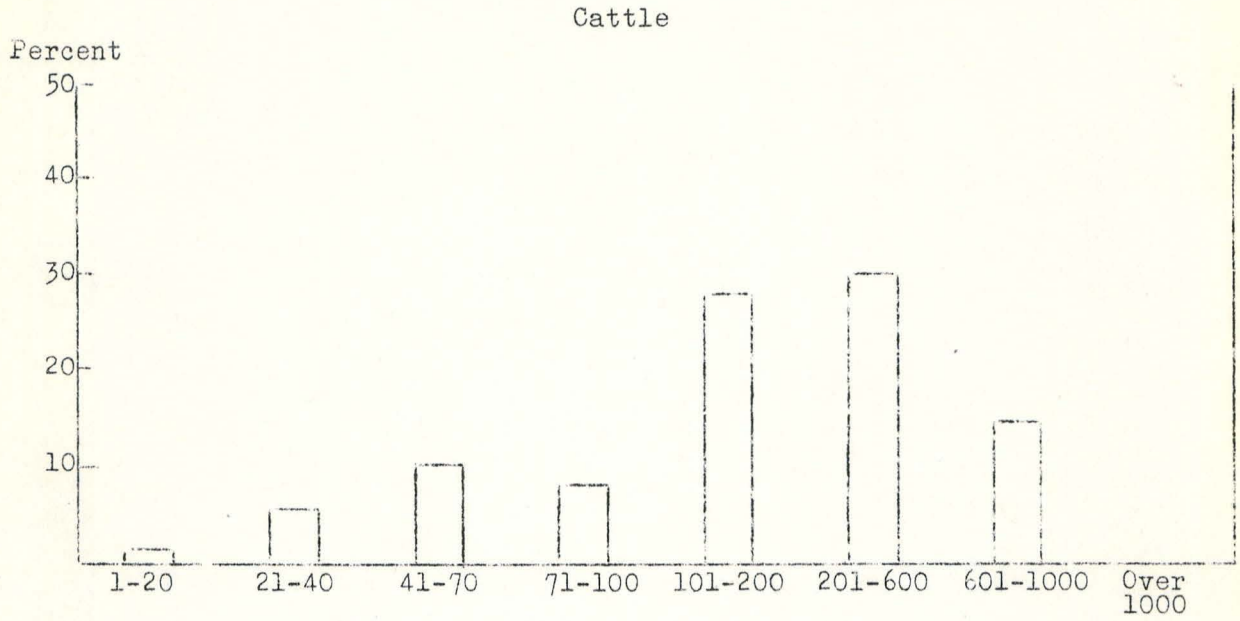


Figure 31.- Percent of total cattle and sheep months use on the Boise National Forest used by the various size classes of livestock enterprises.



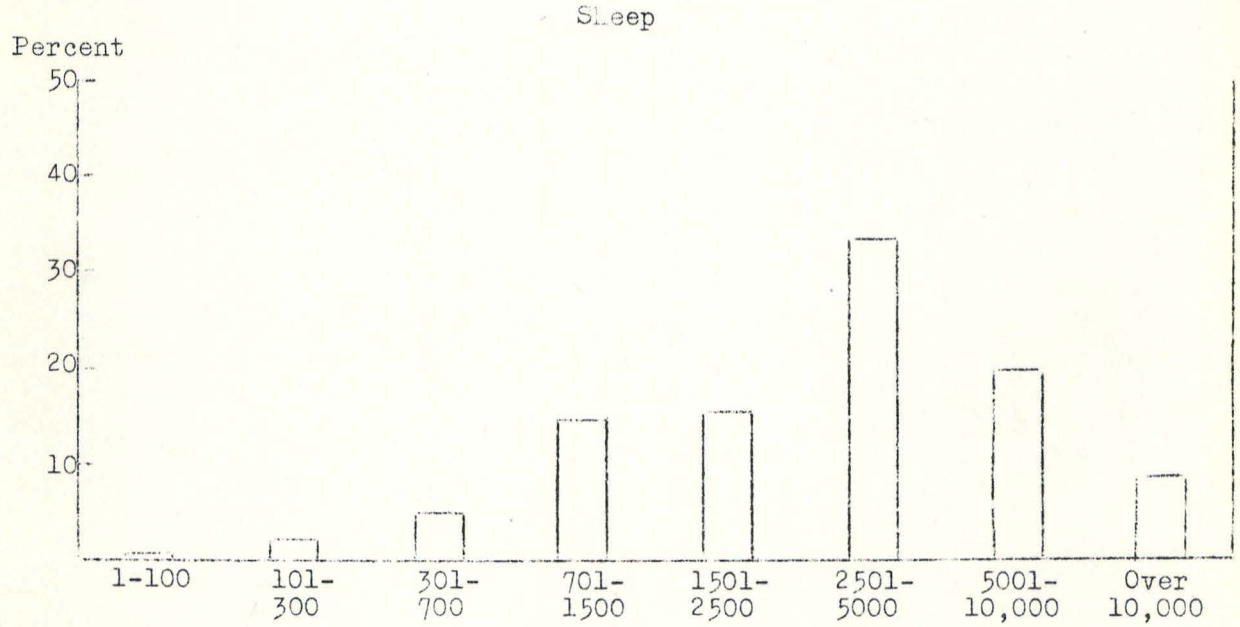
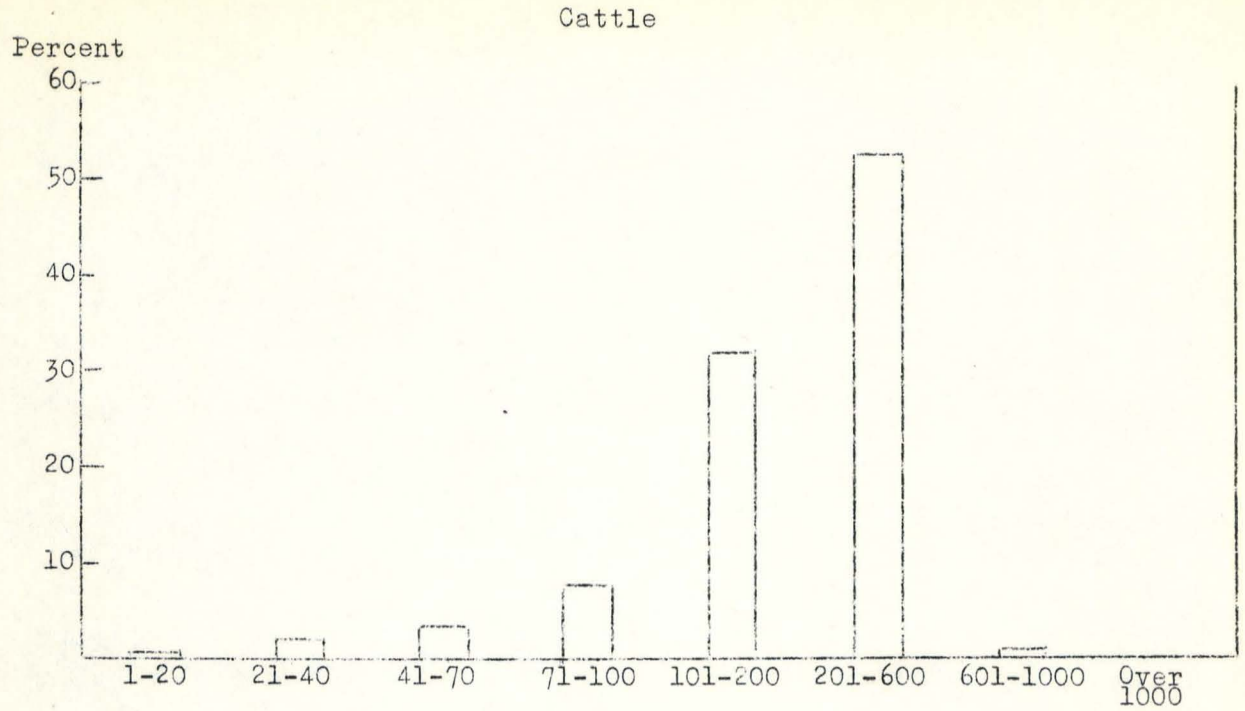


Figure 32.- Percent of total cattle and sheep months use on the Caribou National Forest used by the various size classes of livestock enterprises.



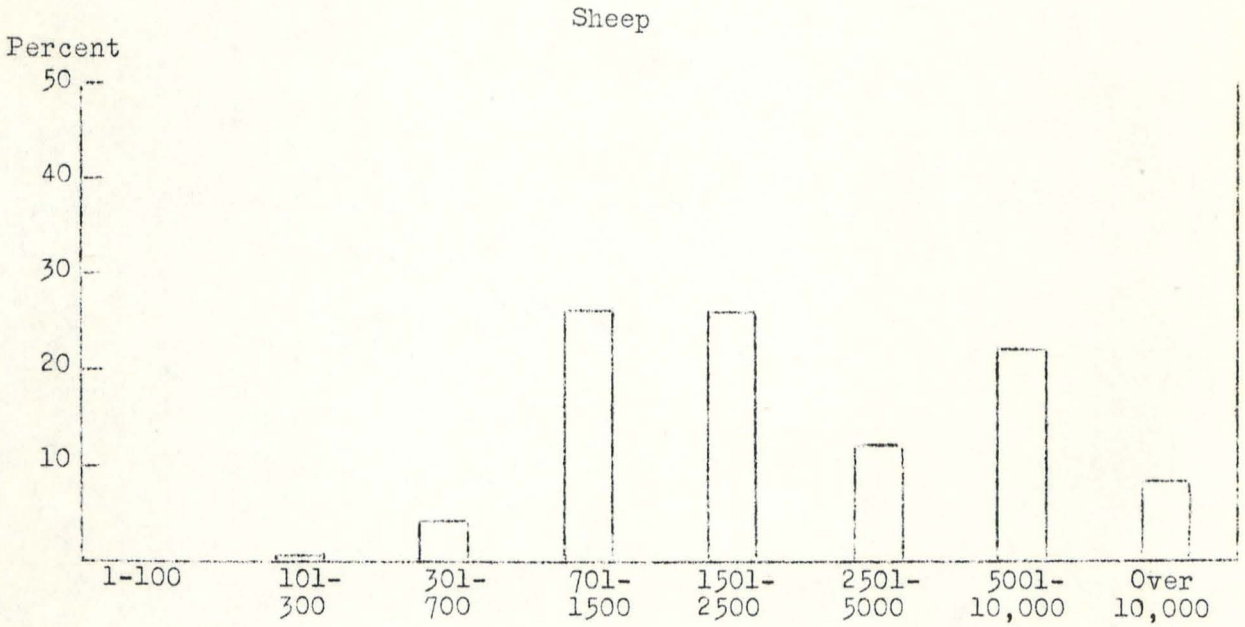
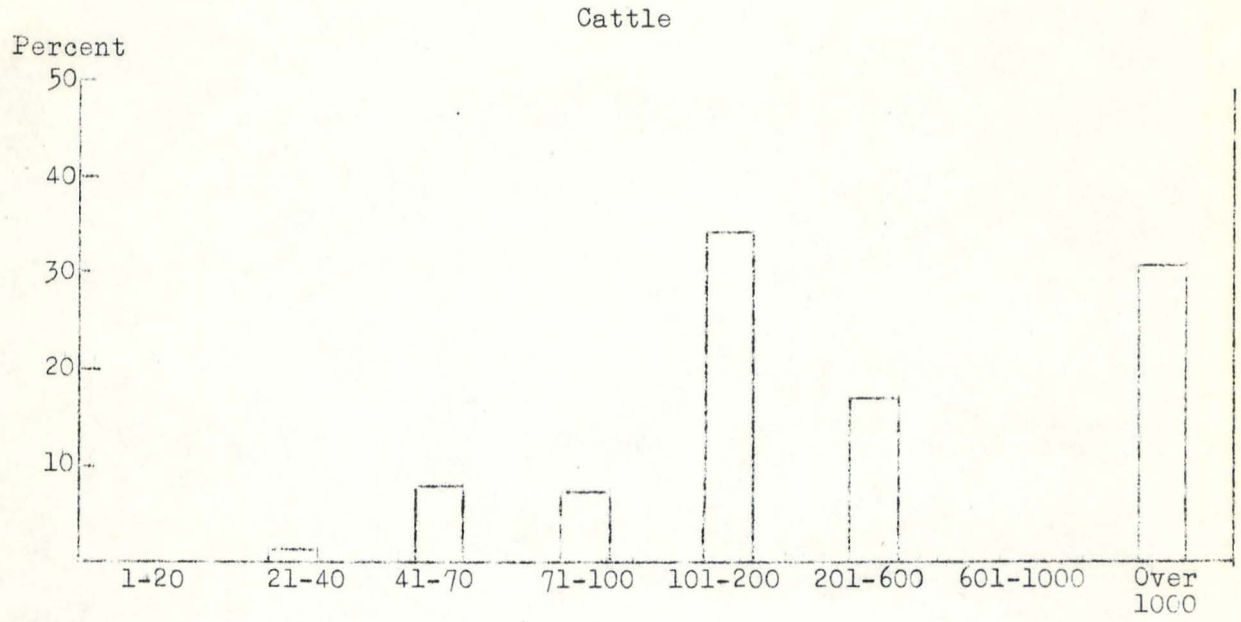


Figure 33.- Percent of total cattle and sheep months use on the Challis National Forest used by the various size classes of livestock enterprises.



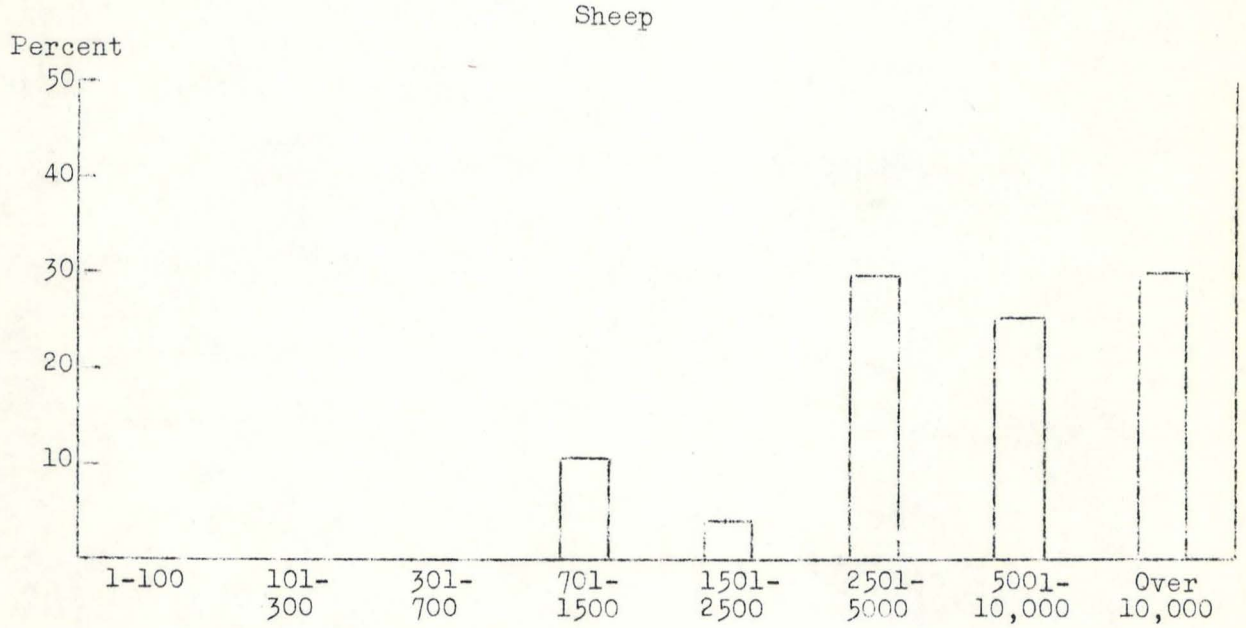


Figure 34.- Percent of total cattle and sheep months use on the Idaho National Forest used by the various size classes of livestock enterprises.

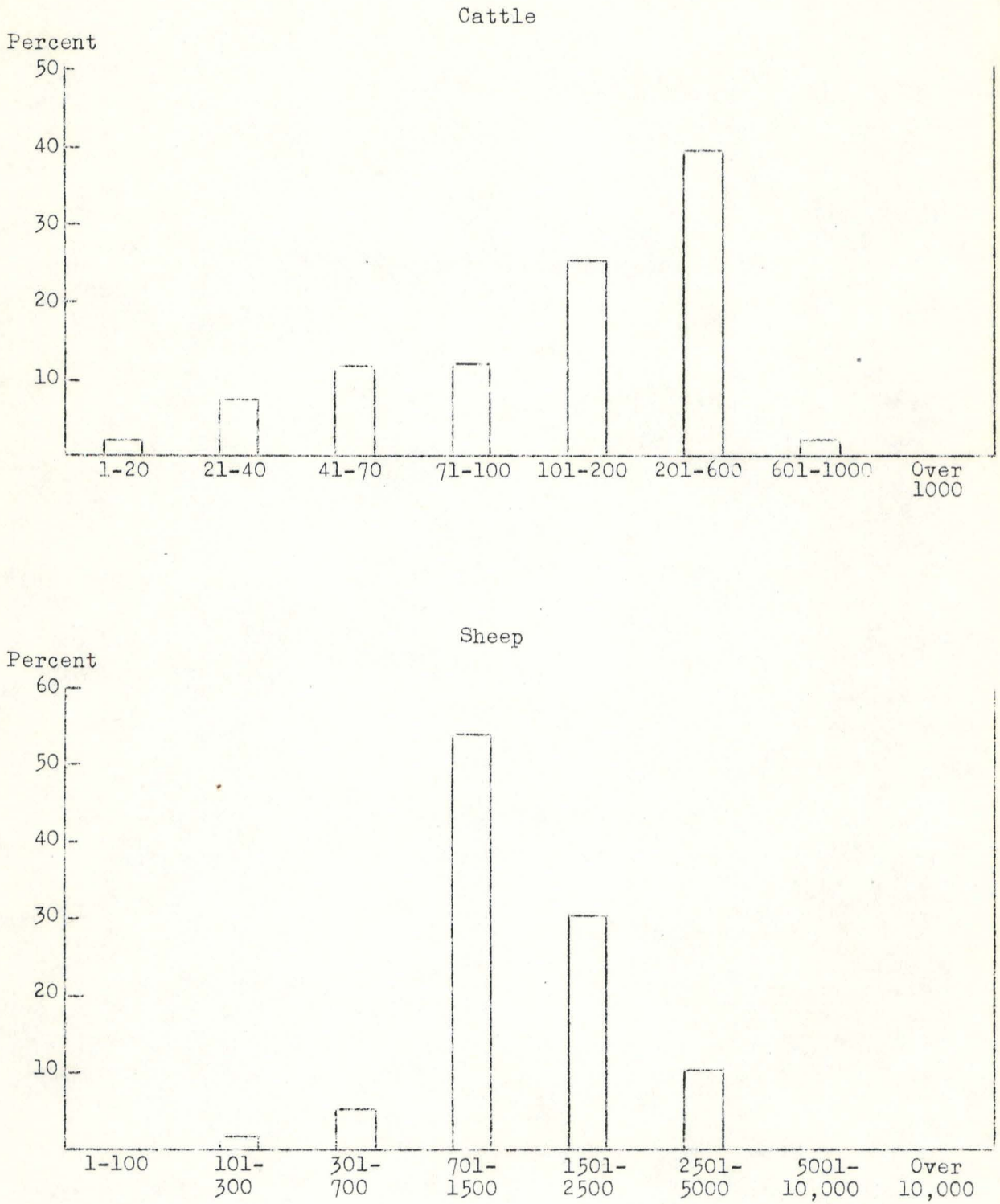
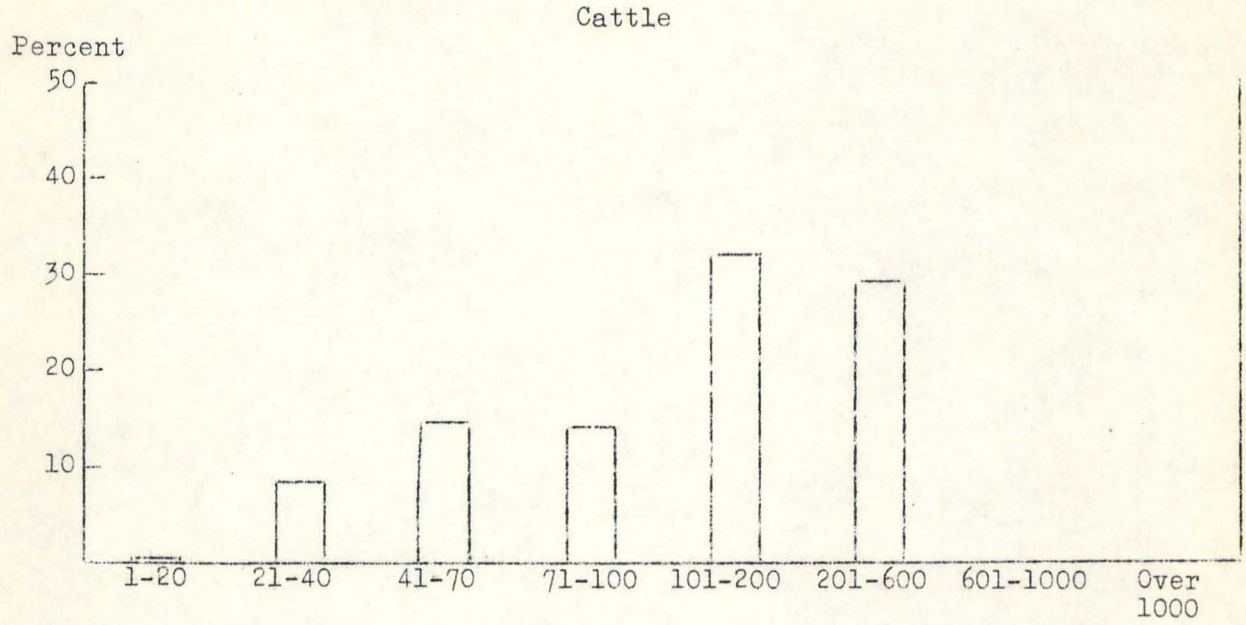


Figure 35.- Percent of total cattle and sheep months use on the Minidoka National Forest used by the various size classes of livestock enterprises.



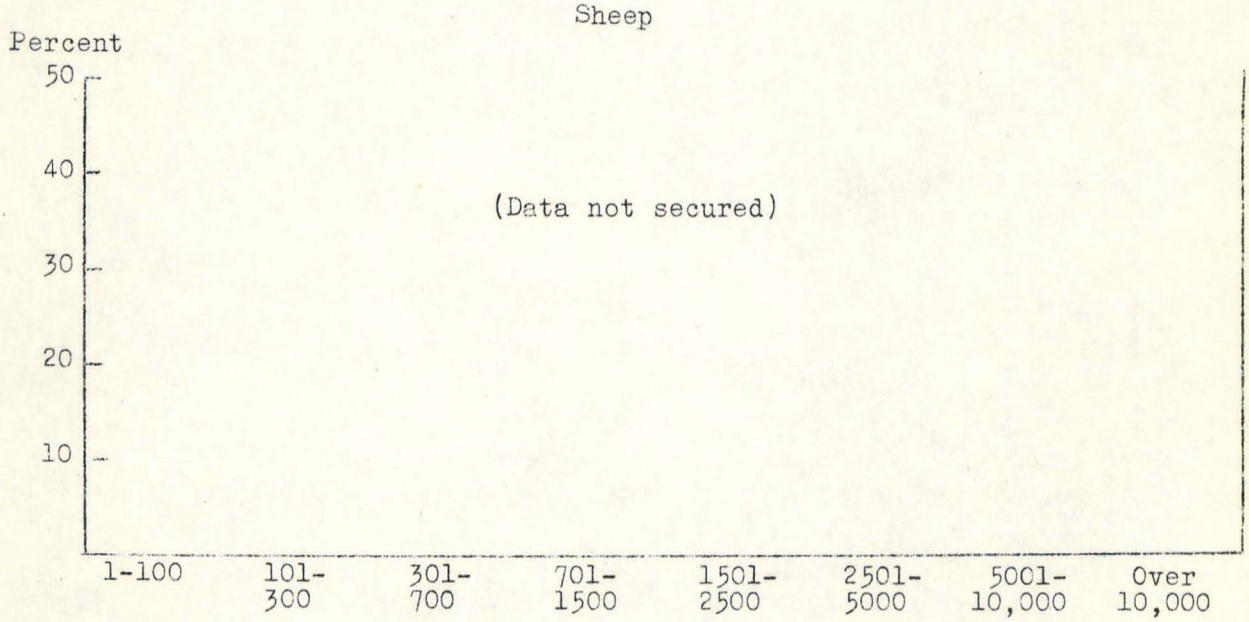
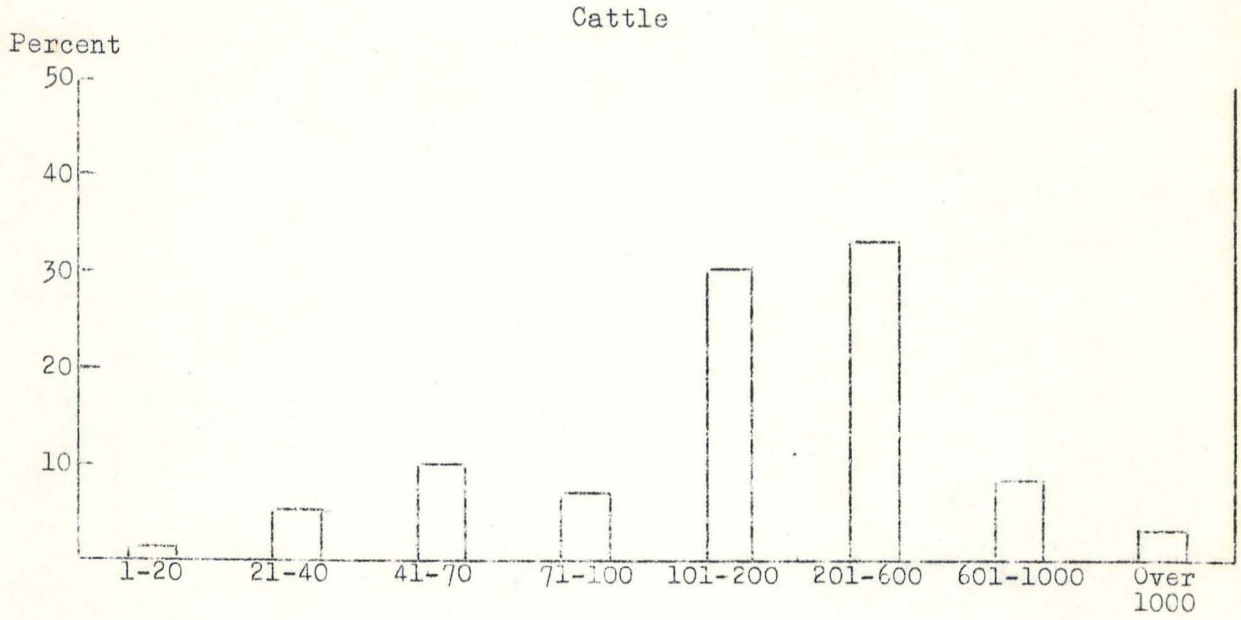


Figure 36.- Percent of total cattle and sheep months use on the Payette National Forest used by the various size classes of livestock enterprises.



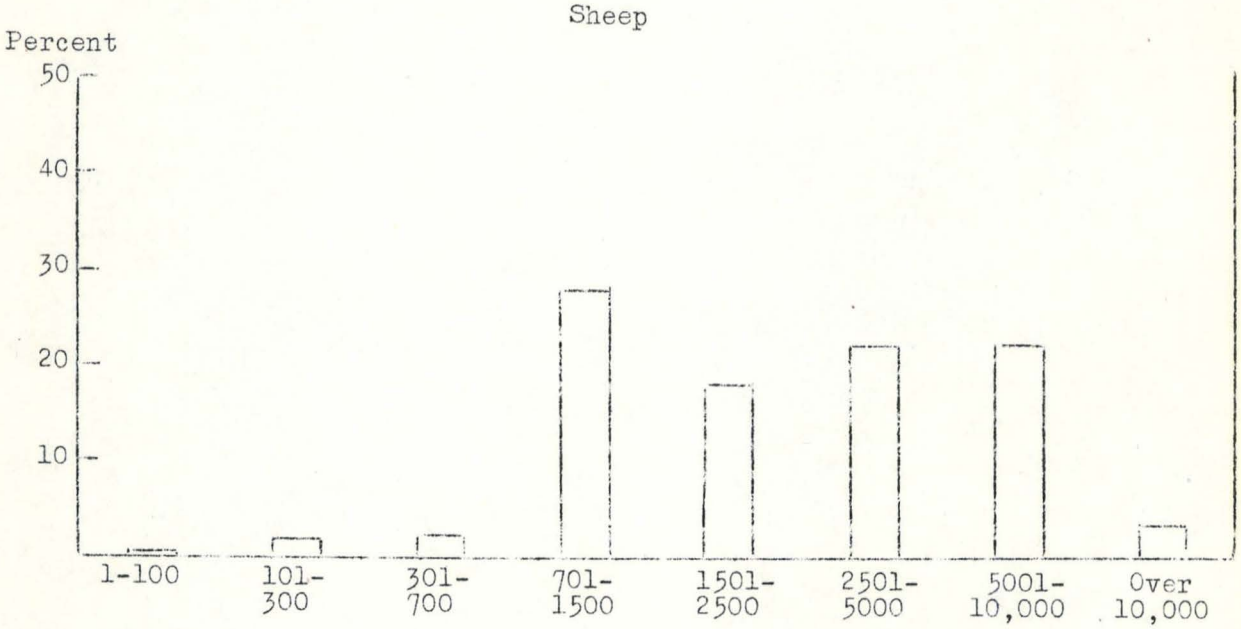
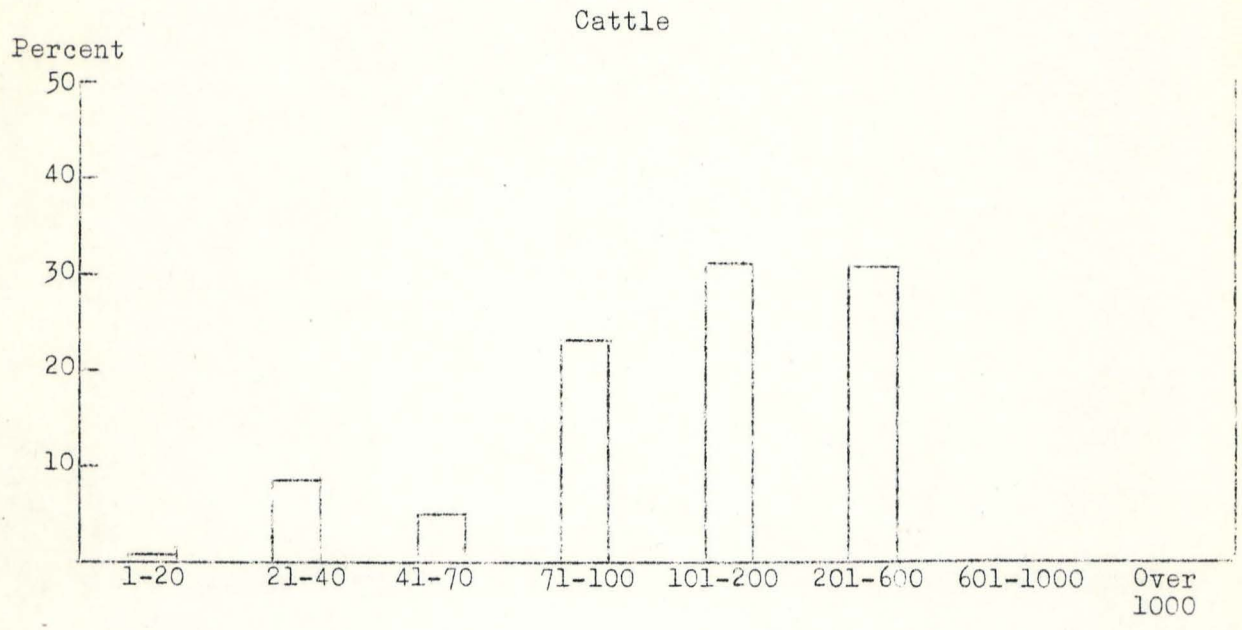


Figure 37.- Percent of total cattle and sheep months use on the Salmon National Forest used by the various size classes of livestock enterprises.



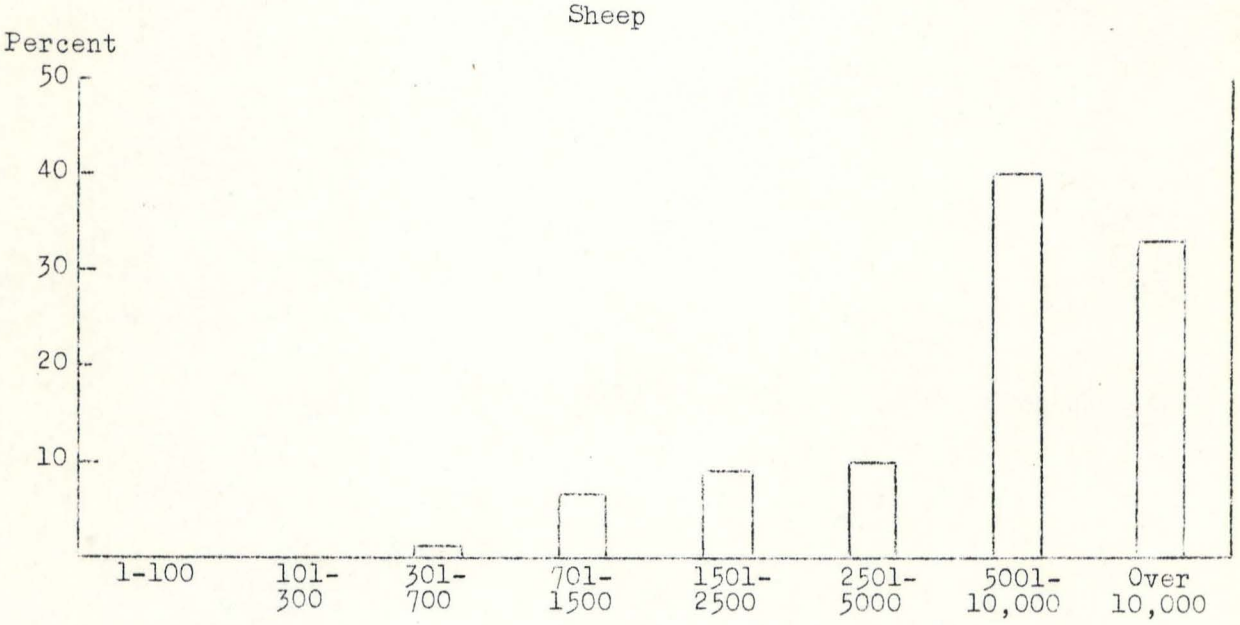


Figure 38.- Percent of total cattle and sheep months use on the Sawtooth National Forest used by the various size classes of livestock enterprises.

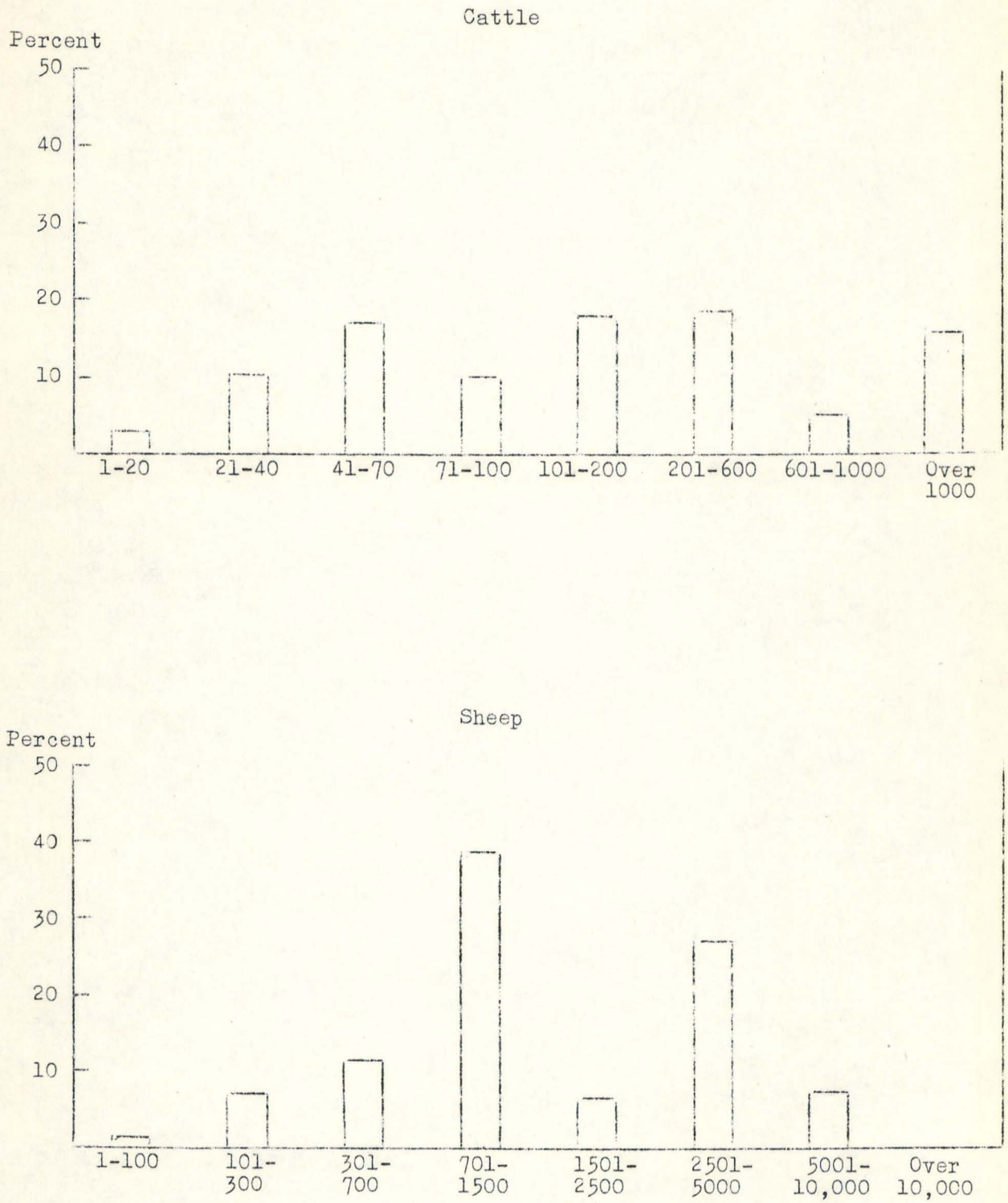
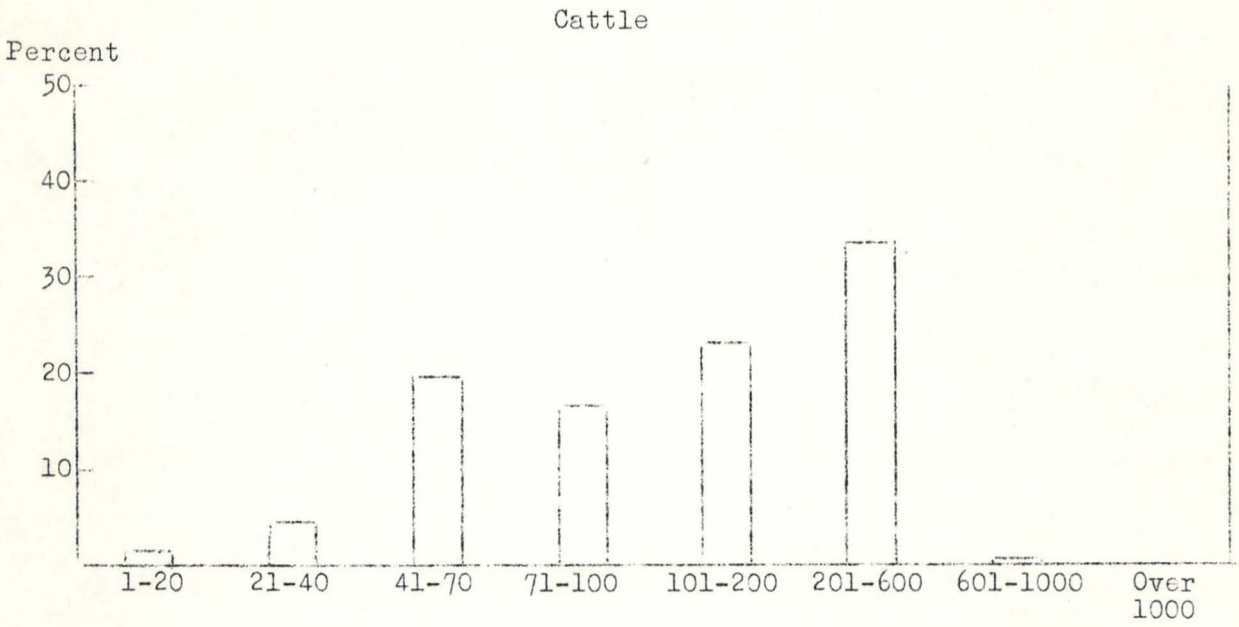


Figure 39.- Percent of total cattle and sheep months use on the Targhee National Forest used by the various size classes of livestock enterprises.



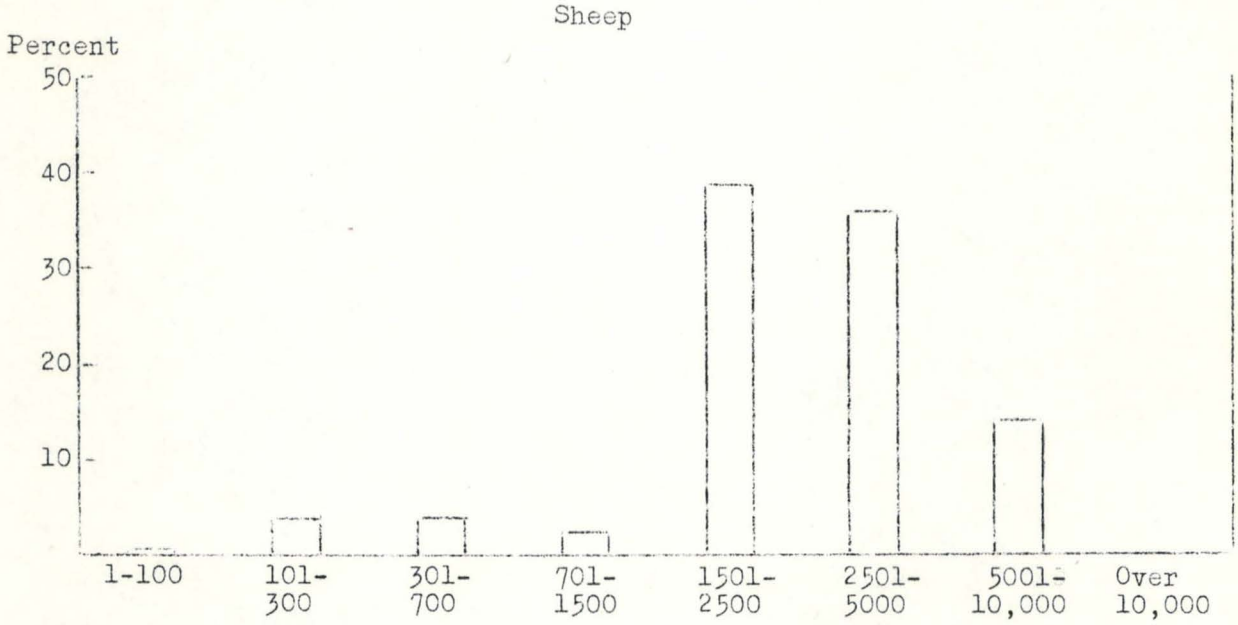


Figure 40.- Percent of total cattle and sheep months use on the Weiser National Forest used by the various size classes of livestock enterprises.

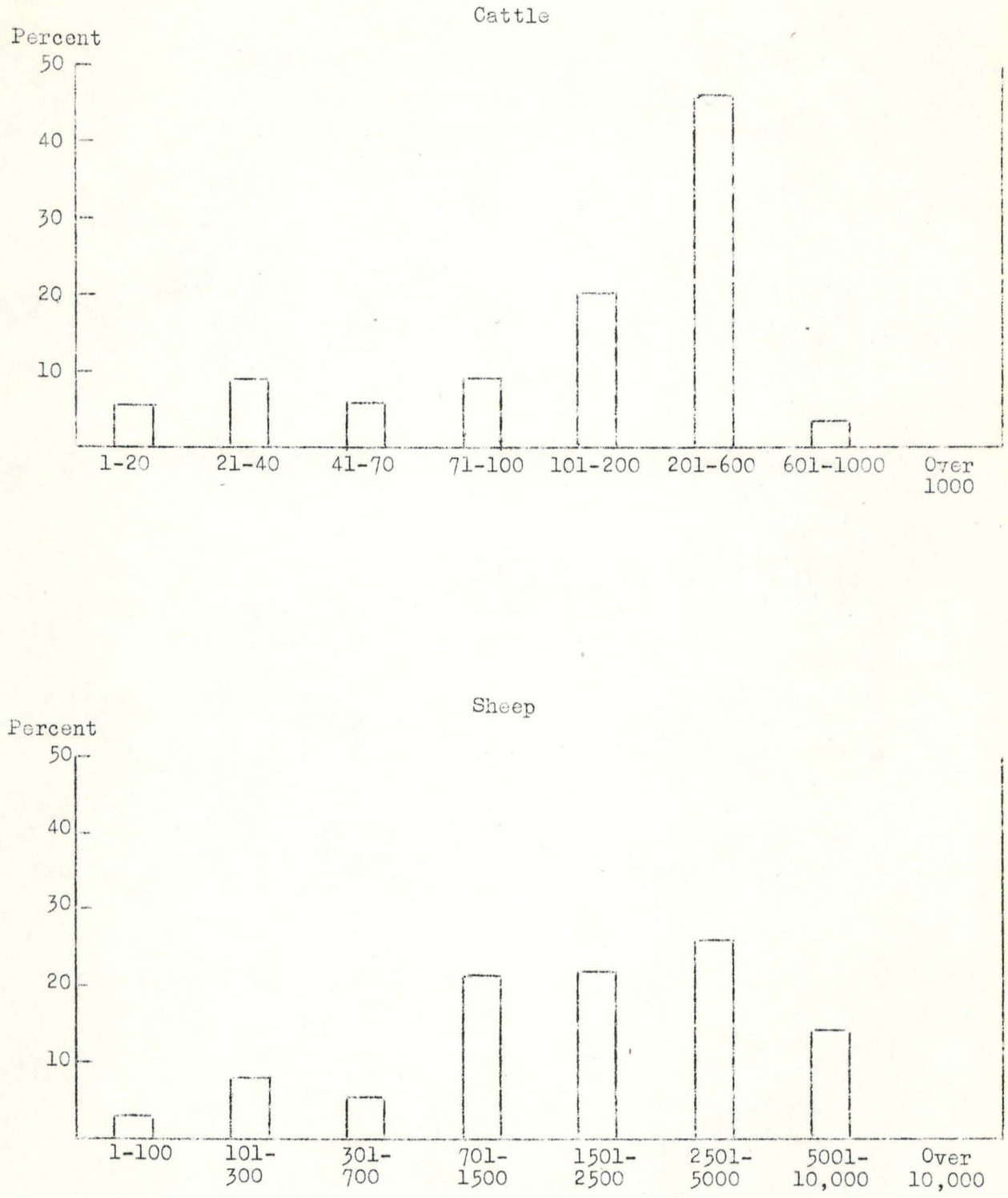
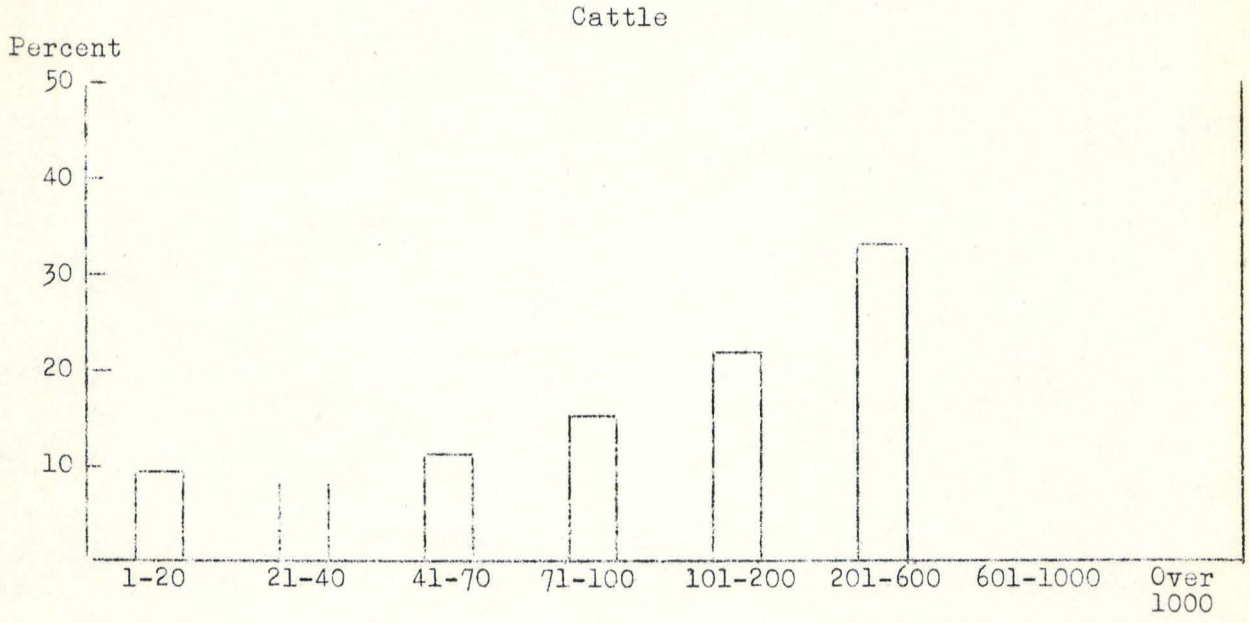


Figure 41.- Percent of total cattle and sheep months use on the Lemhi Grazing District used by the various size classes of livestock enterprises.



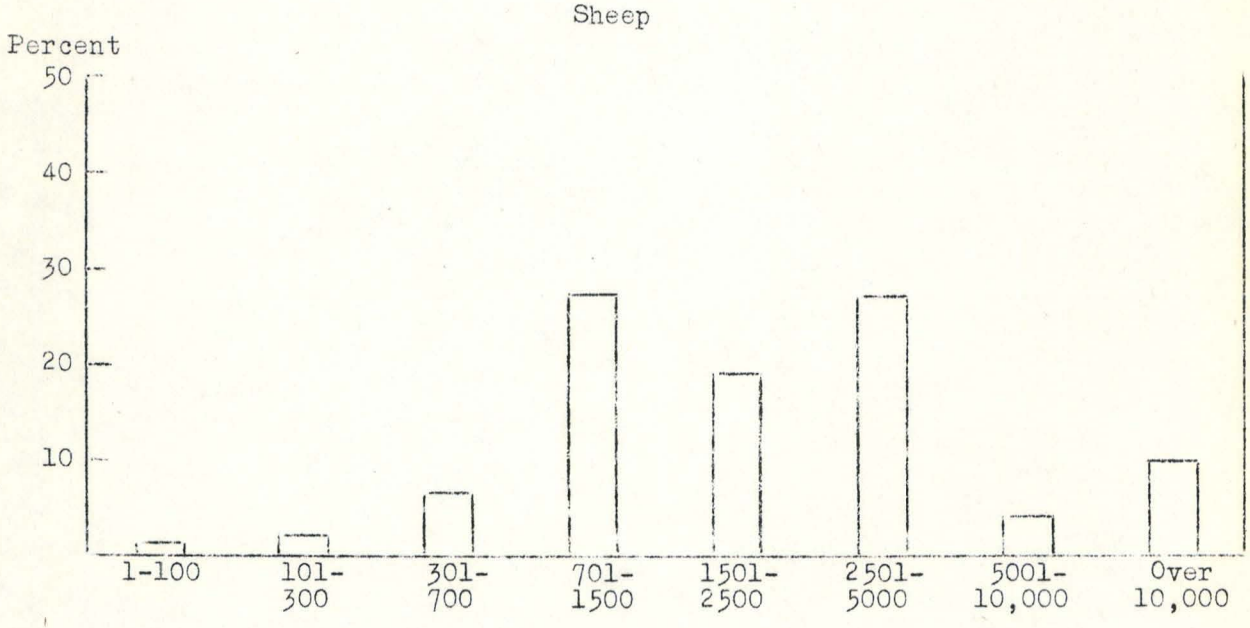


Figure 42.- Percent of total cattle and sheep months use on the Lost River Grazing District used by the various size classes of livestock enterprises.

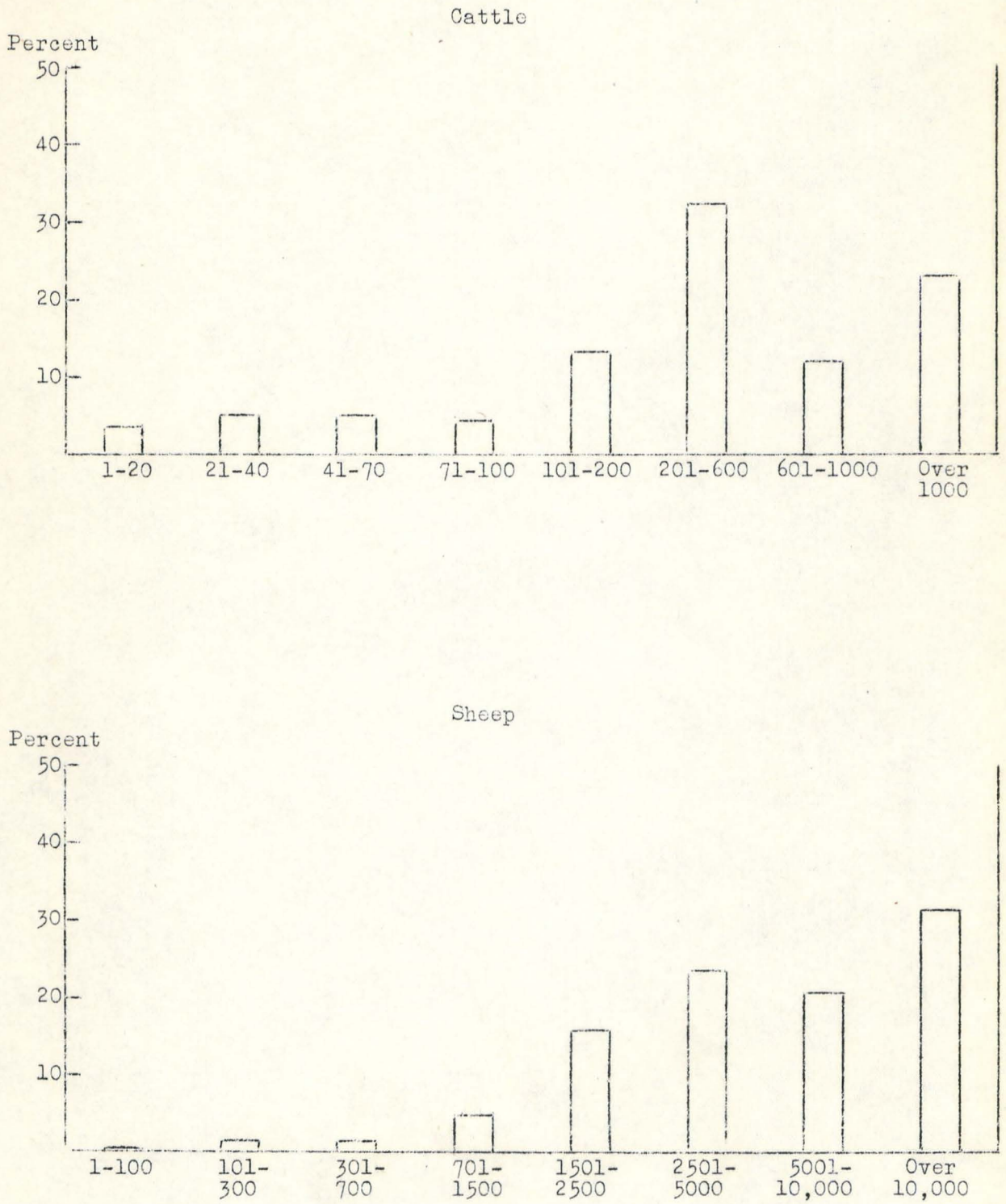


Figure 43.- Percent of total cattle and sheep months use on the Owyhee Grazing District used by the various size classes of livestock enterprises.

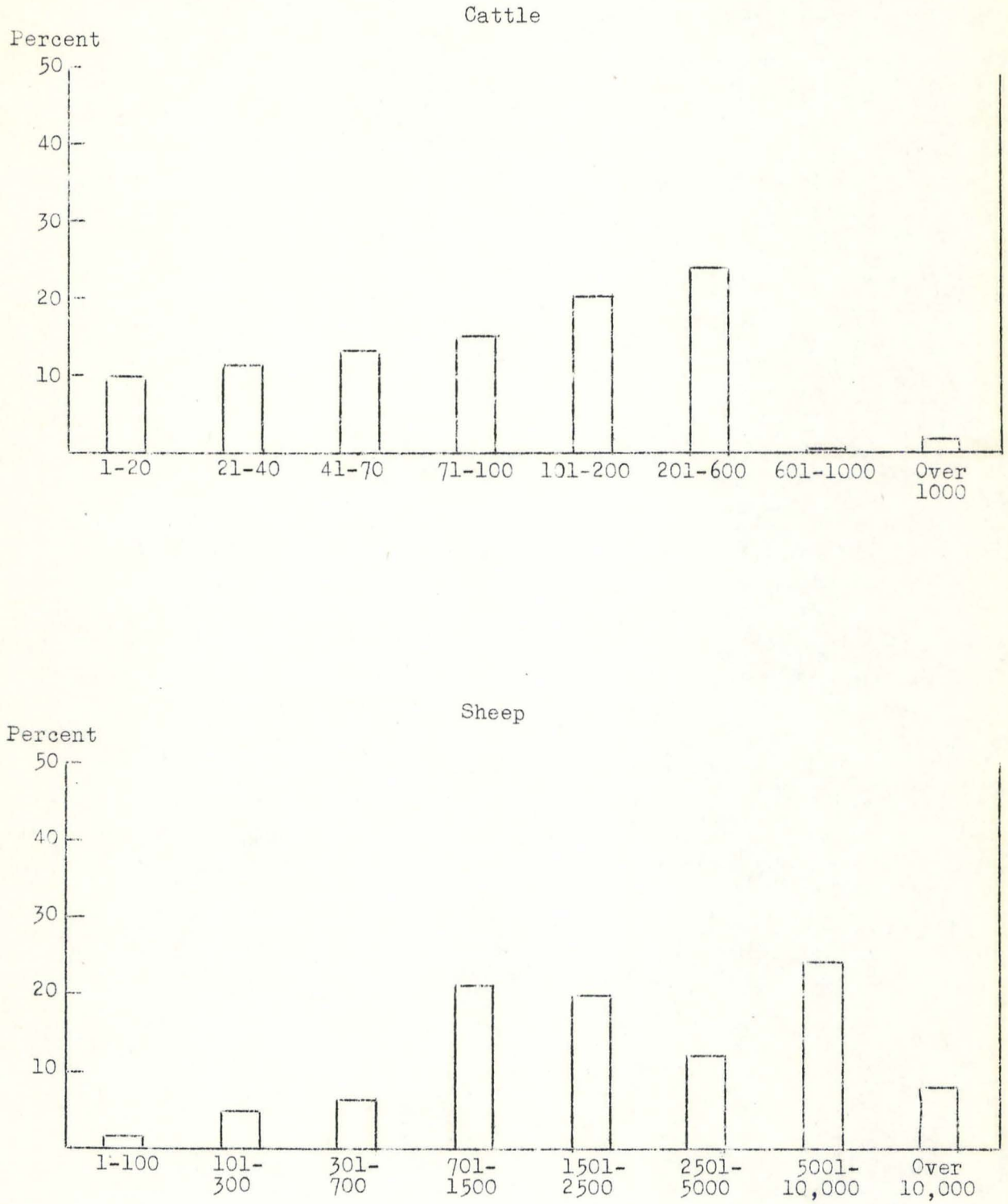


Figure 44.- Percent of total cattle and sheep months use on the Wood River and Twin Falls Grazing Districts used by the various size classes of livestock enterprises.

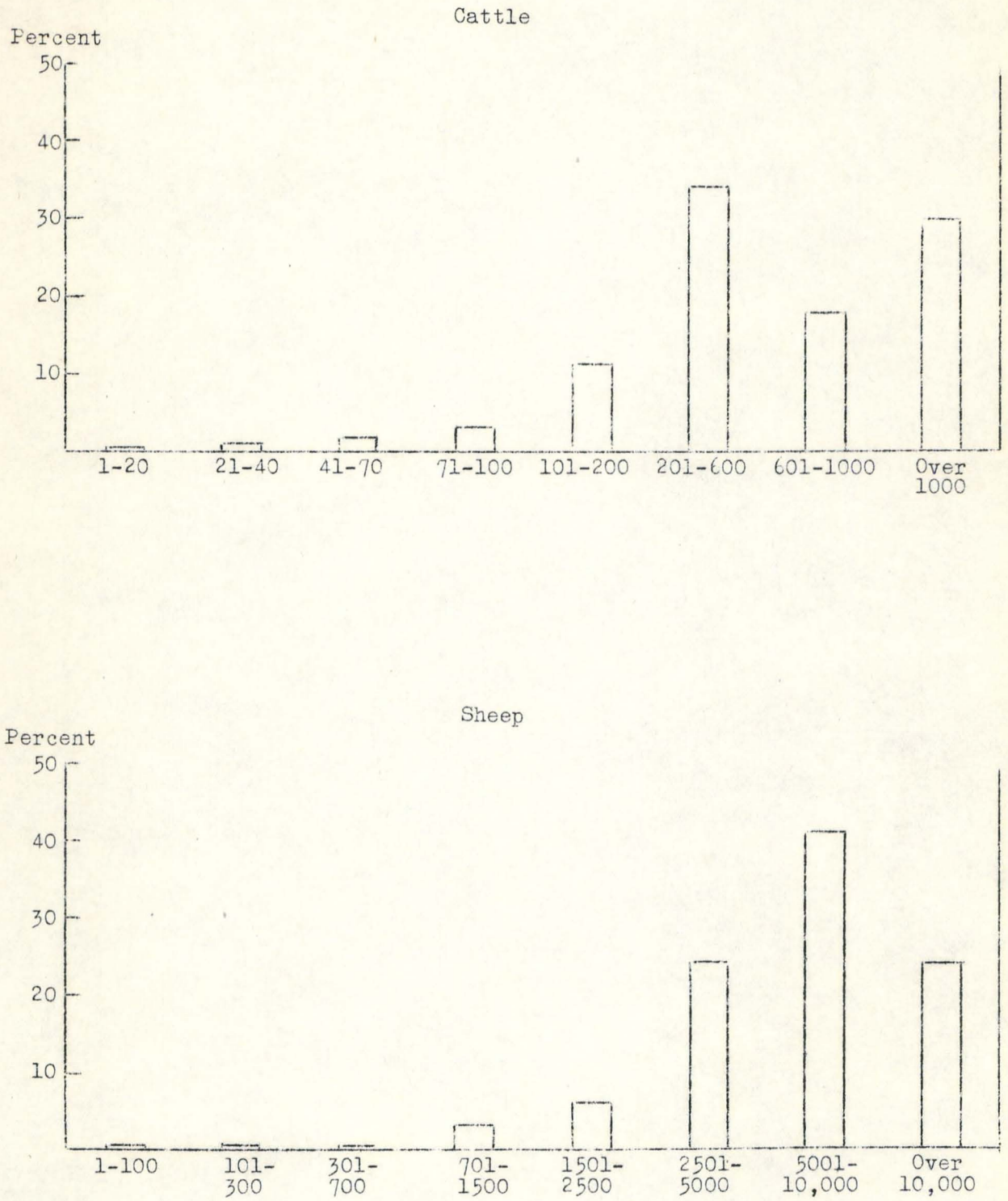
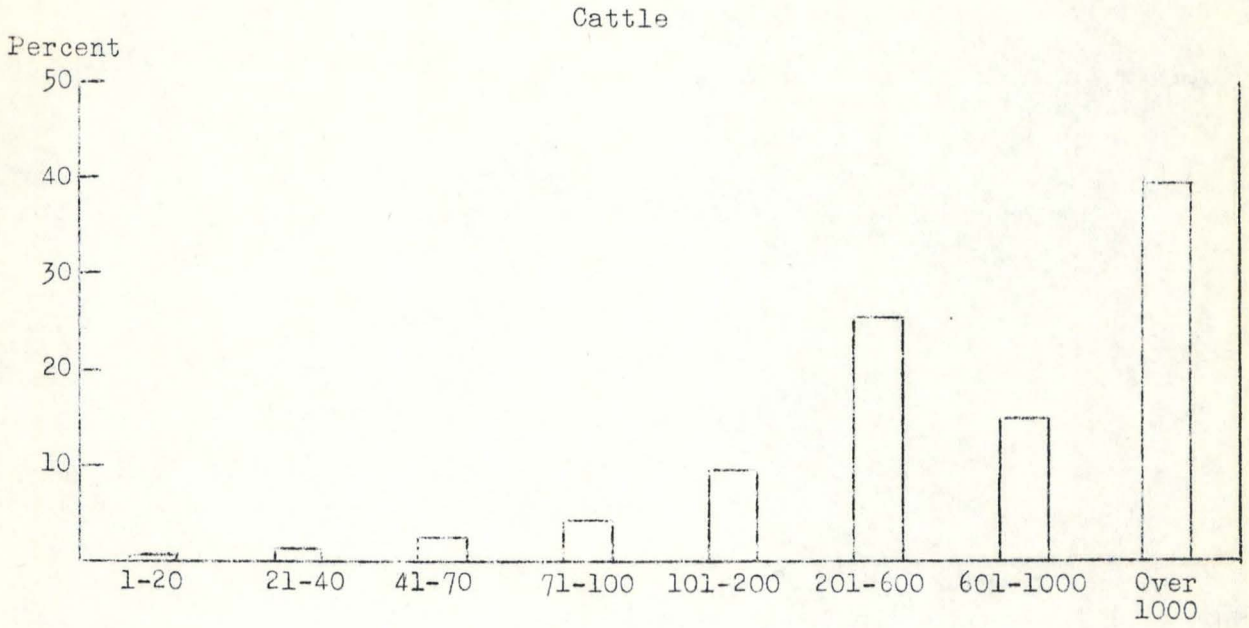


Figure 45.- Percent of total cattle and sheep months use on the national forests of Nevada used by the various size classes of livestock enterprises.



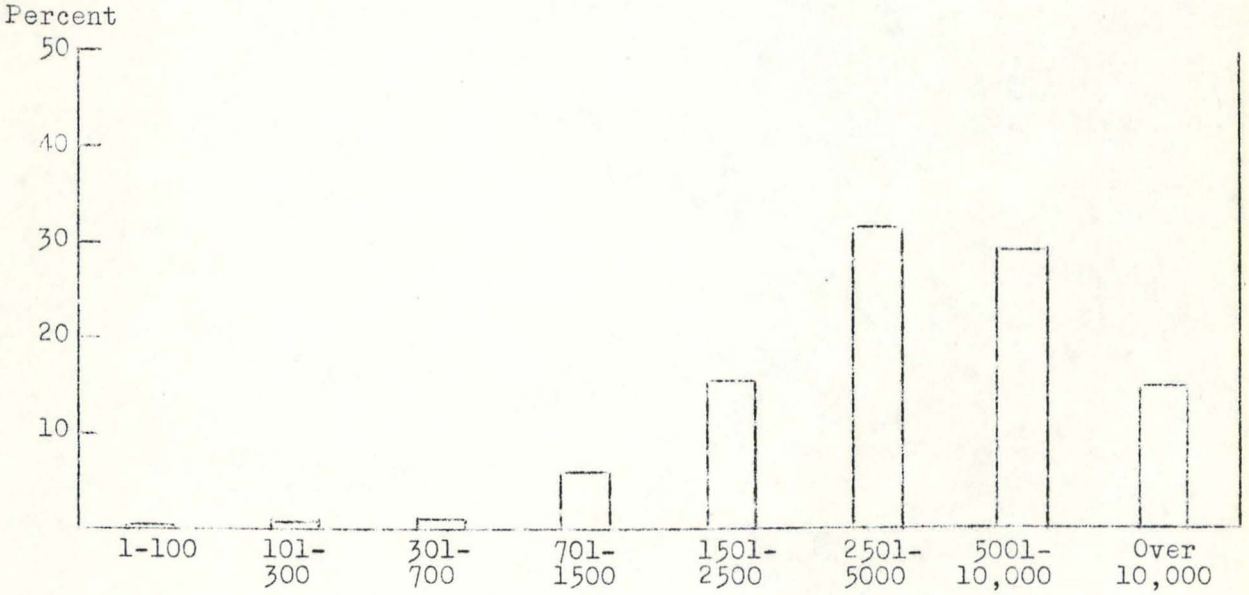
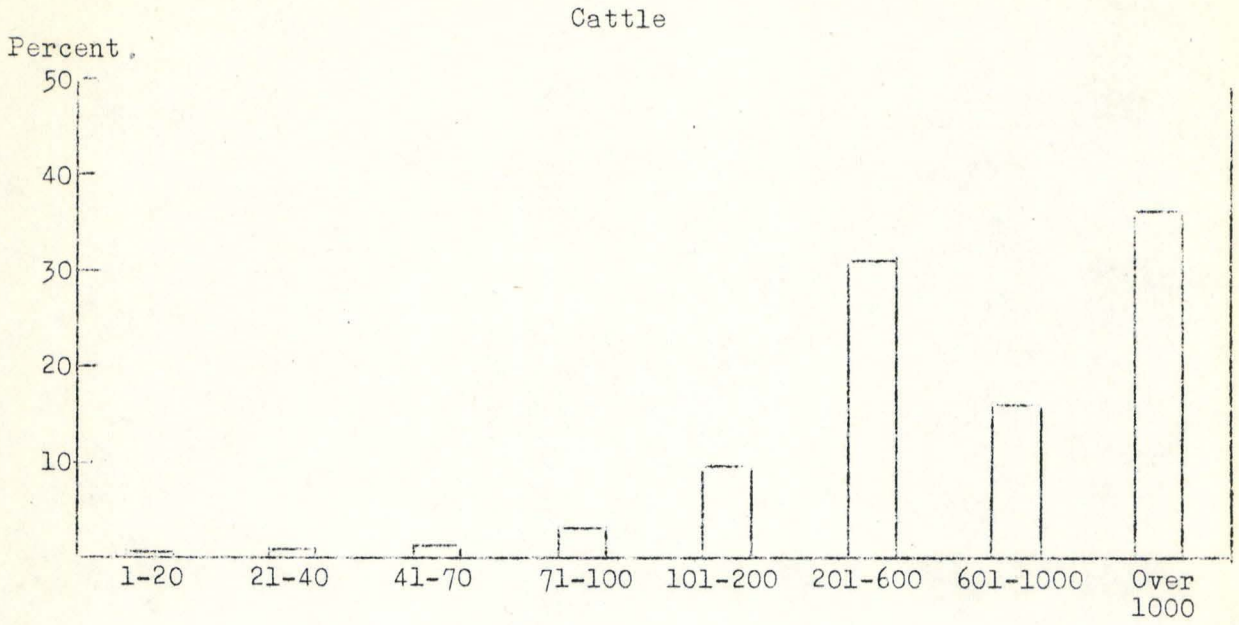


Figure 46.- Percent of total cattle and sheep months use on the grazing districts of Nevada used by the various size classes of livestock enterprises.



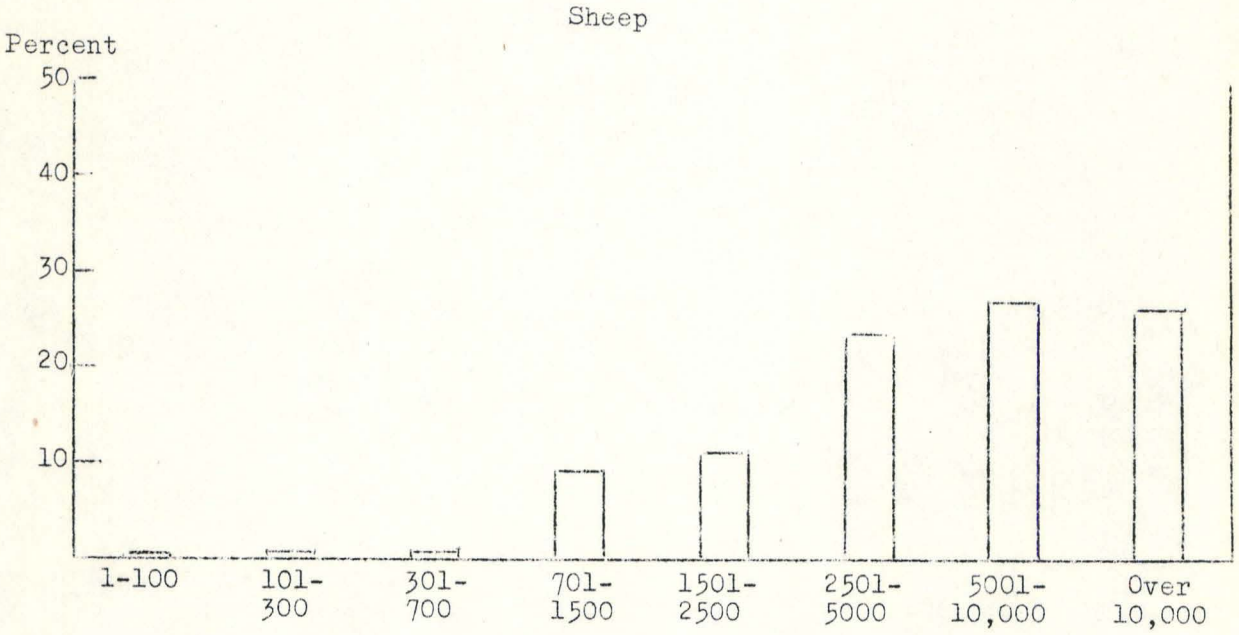
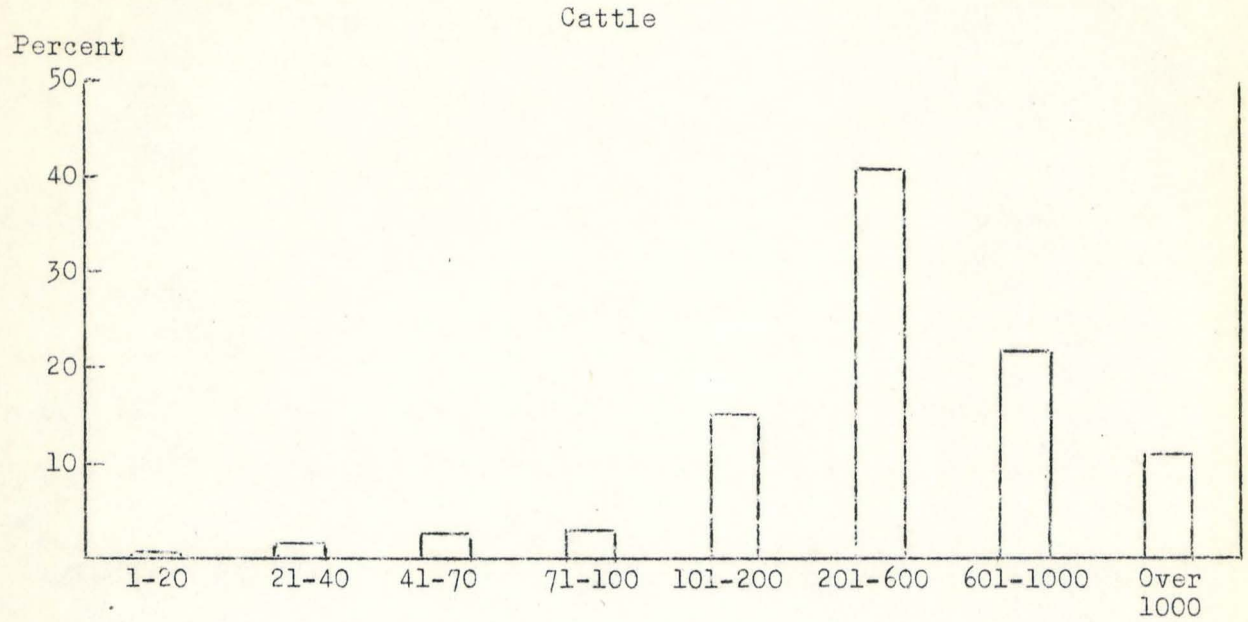


Figure 47.- Percent of total cattle and sheep months use on the Humboldt* National Forest used by the various size classes of livestock enterprises.

* Includes part of Old Nevada Forest, Paradise Division.



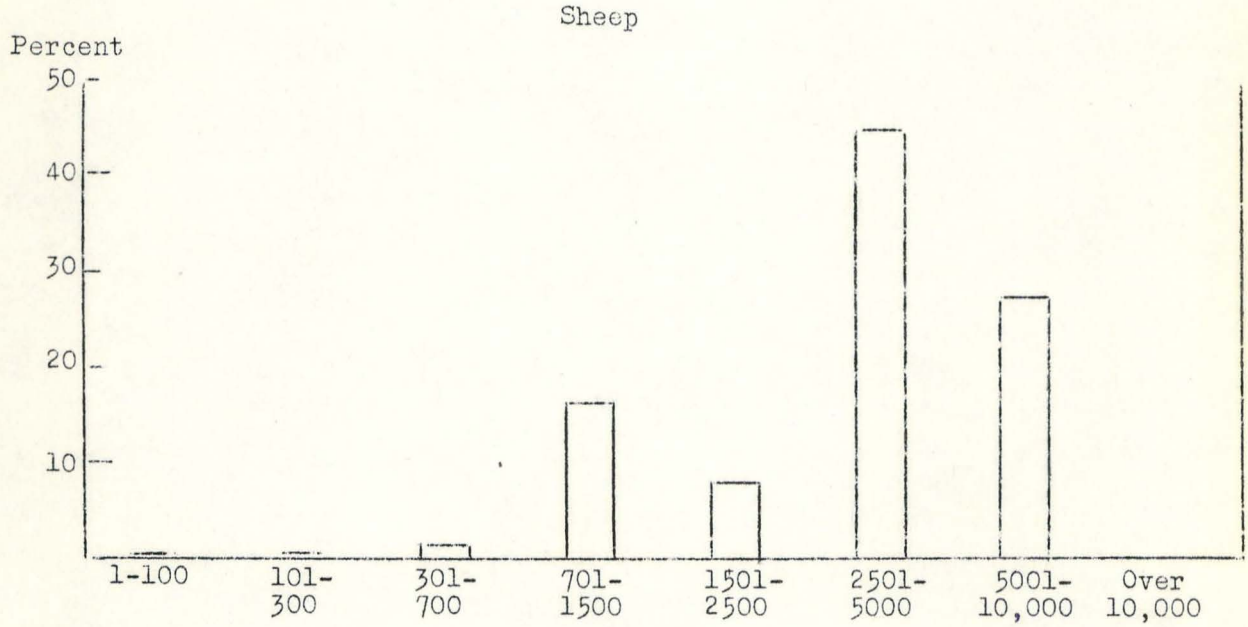


Figure 48.- Percent of total cattle and sheep months use on the Nevada* National Forest used by the various size classes of livestock enterprises.

* Includes all of the present Toiyabe Forest except Paradise Valley Division.

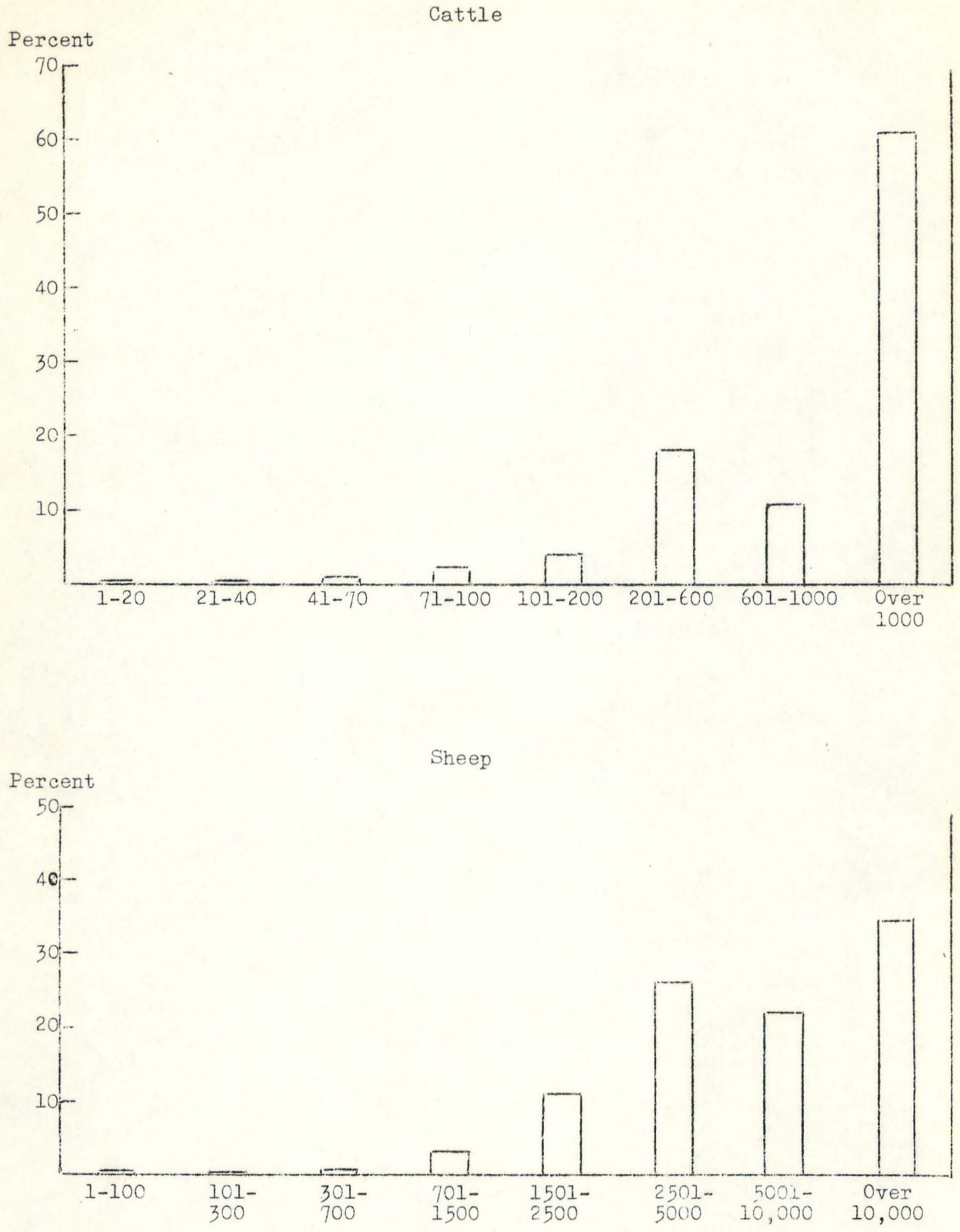
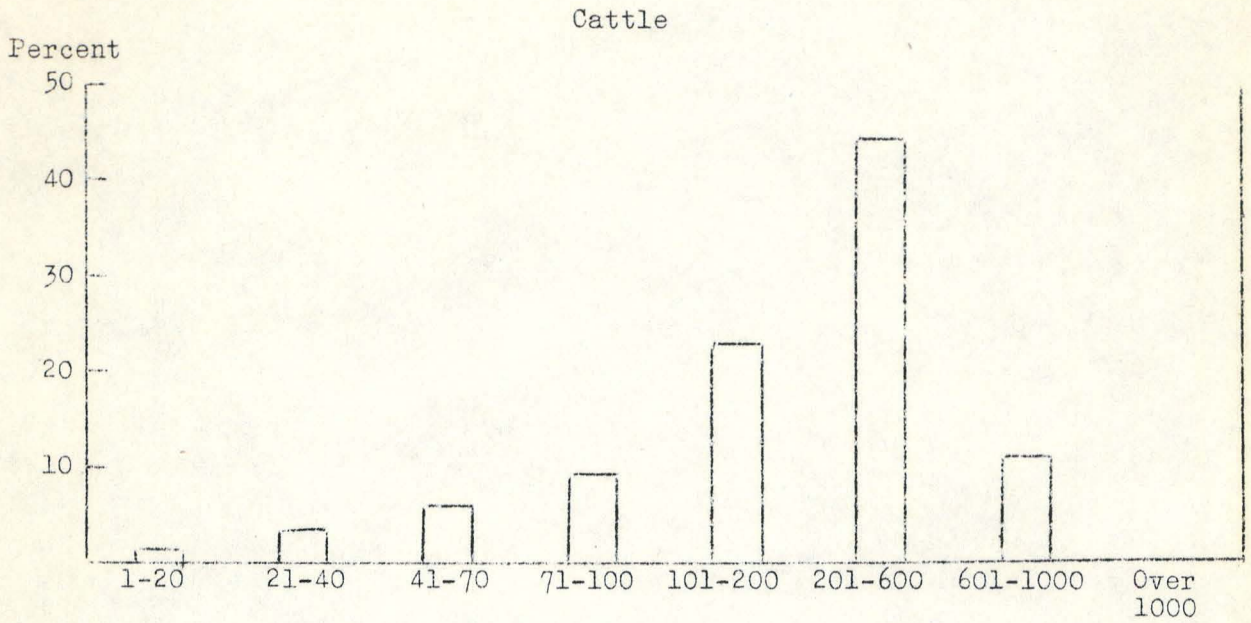


Figure 49.- Percent of total cattle and sheep months use on the Elko Grazing District used by the various size classes of livestock enterprises.



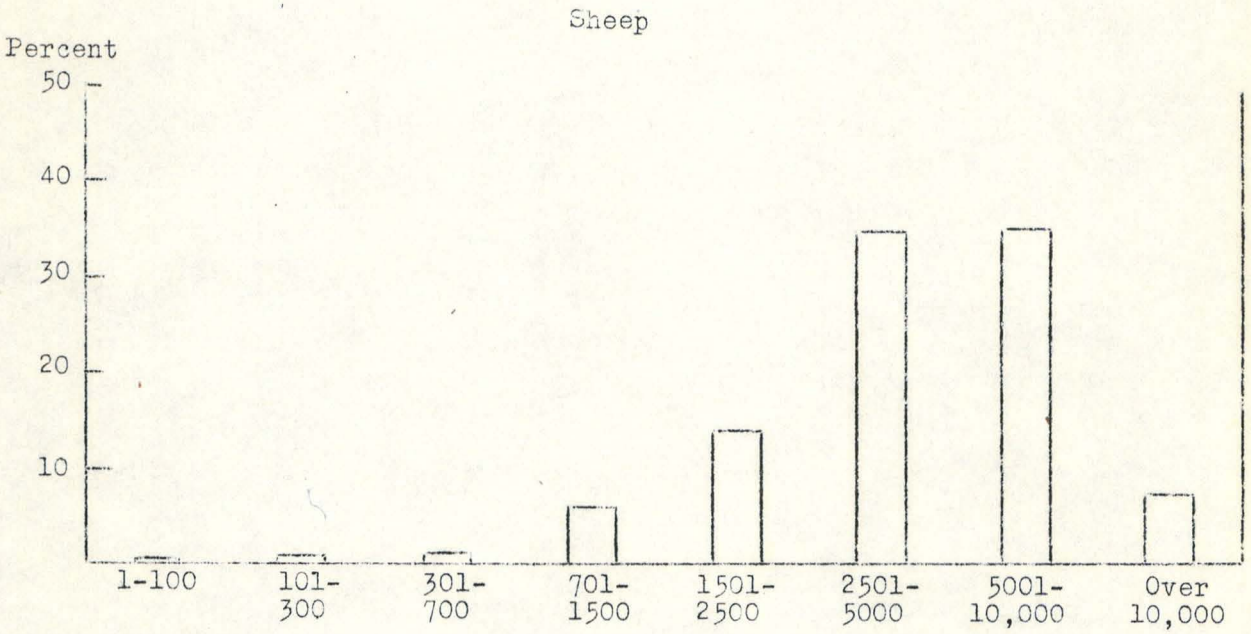


Figure 50.- Percent of total cattle and sheep months use on the Ely Grazing District used by the various size classes of livestock enterprises.

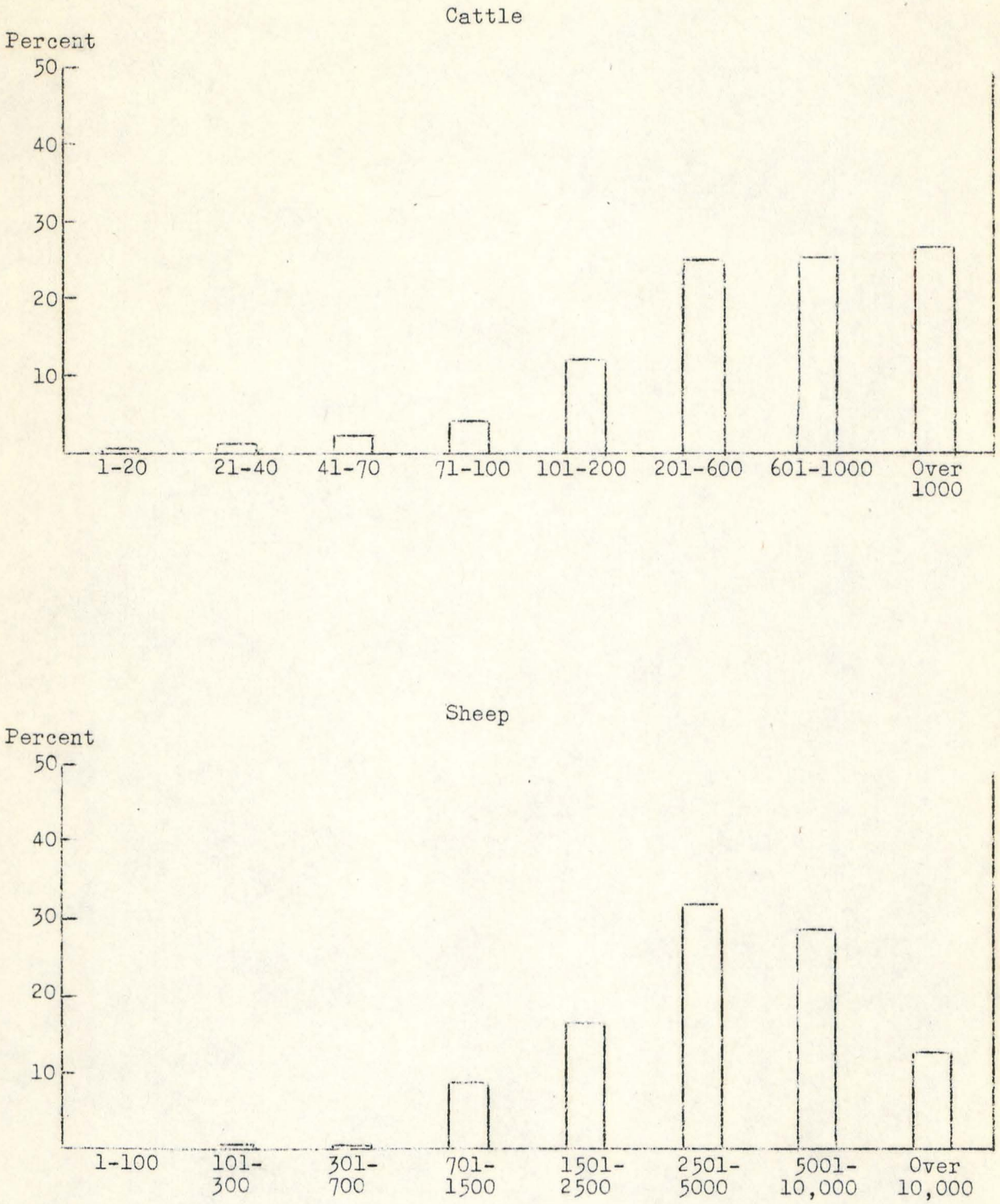


Figure 51.- Percent of total cattle and sheep months use on the Pyramid Grazing District used by the various size classes of livestock enterprises.

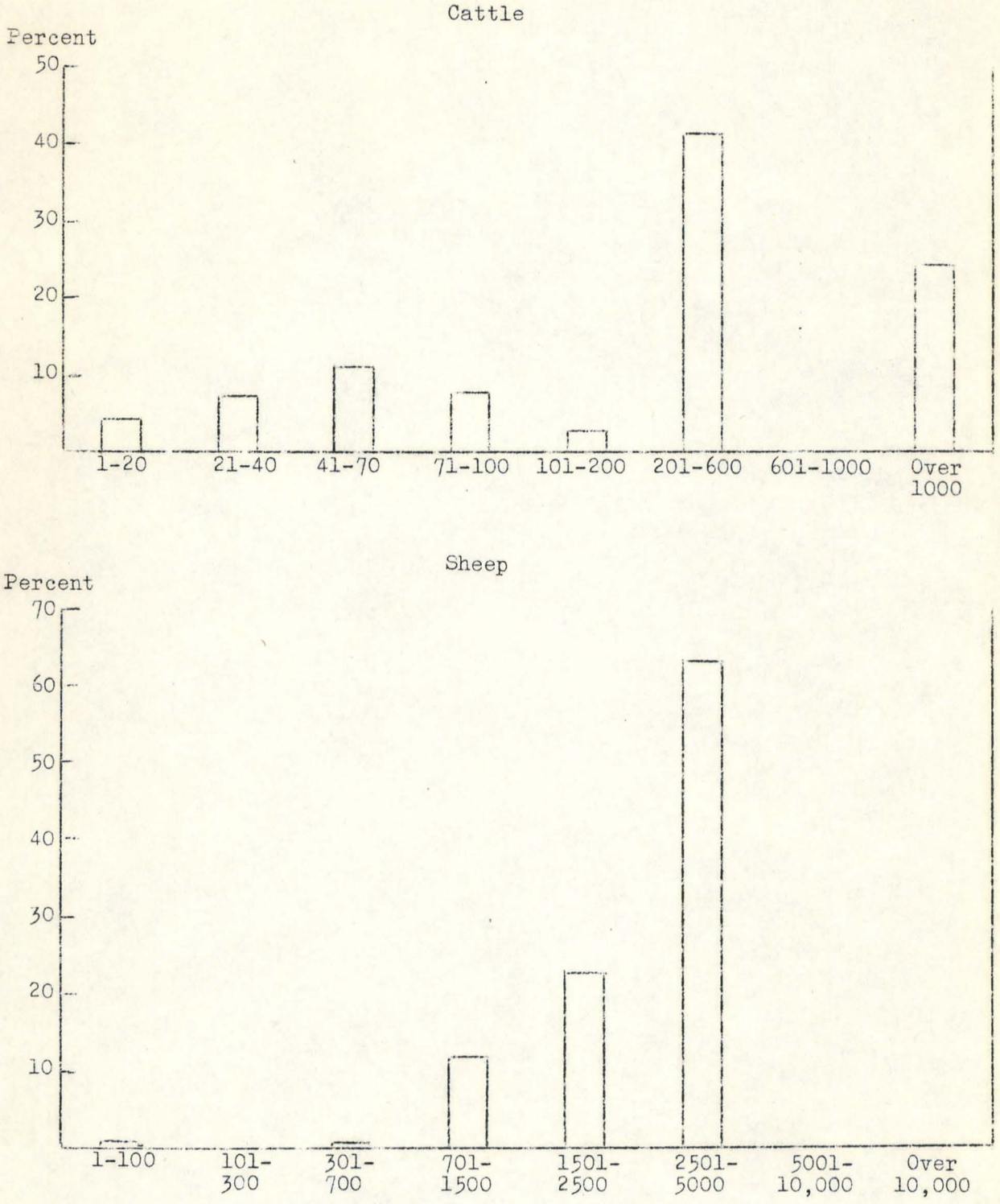
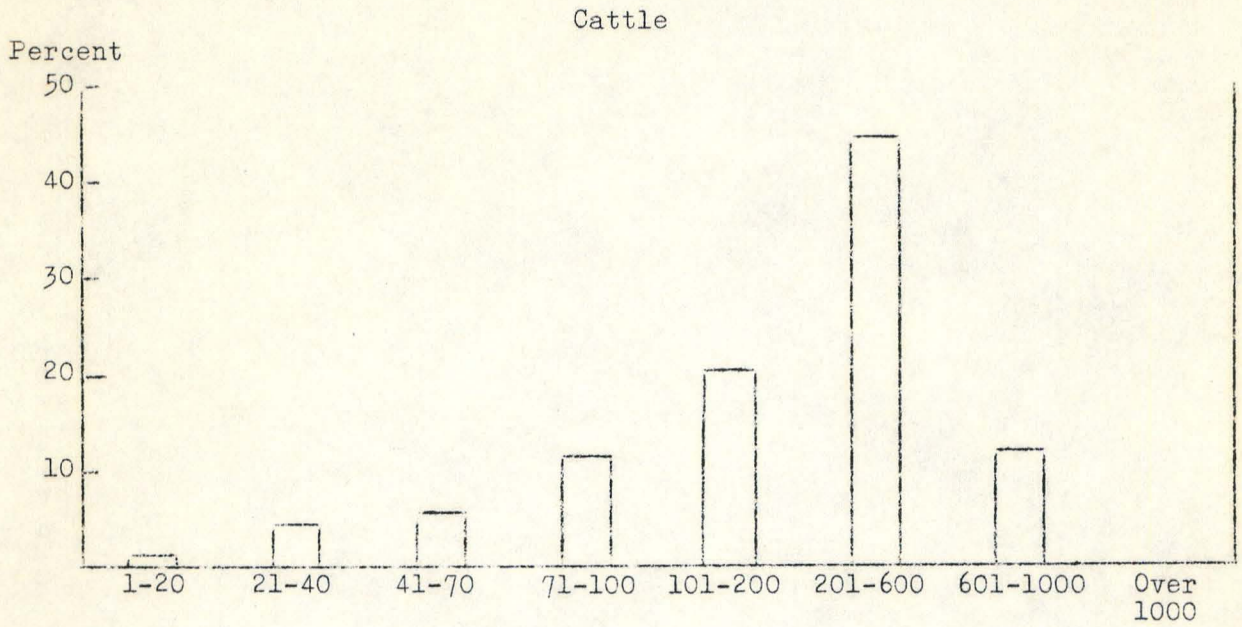


Figure 52.- Percent of total cattle and sheep months use on the Searchlight Grazing District used by the various size classes of livestock enterprises.



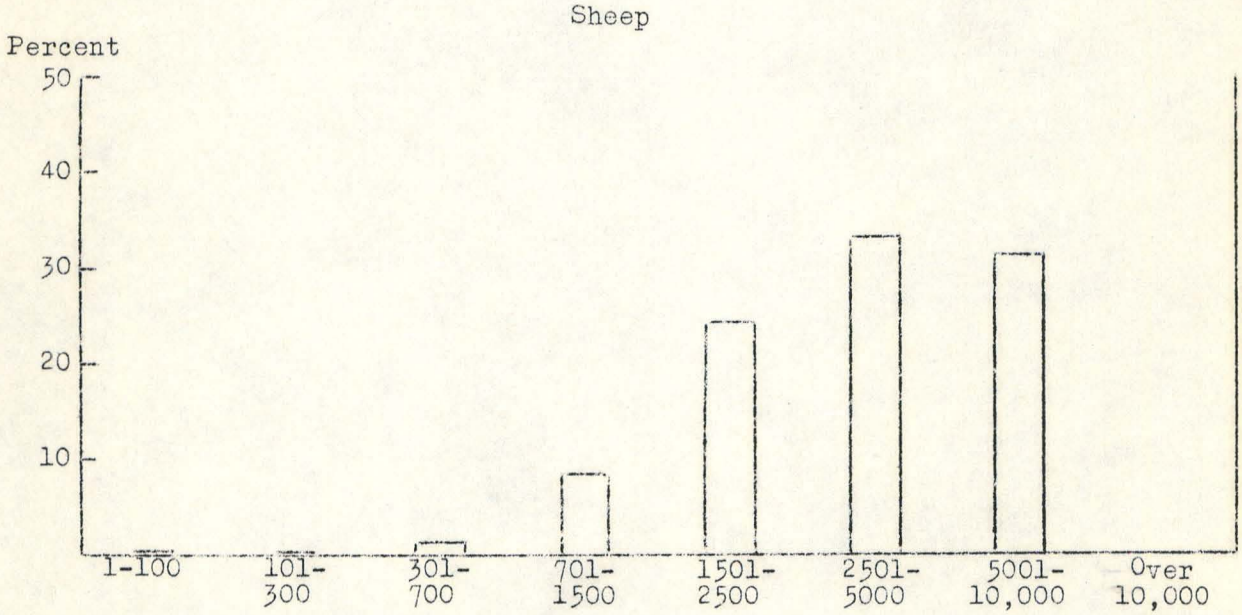
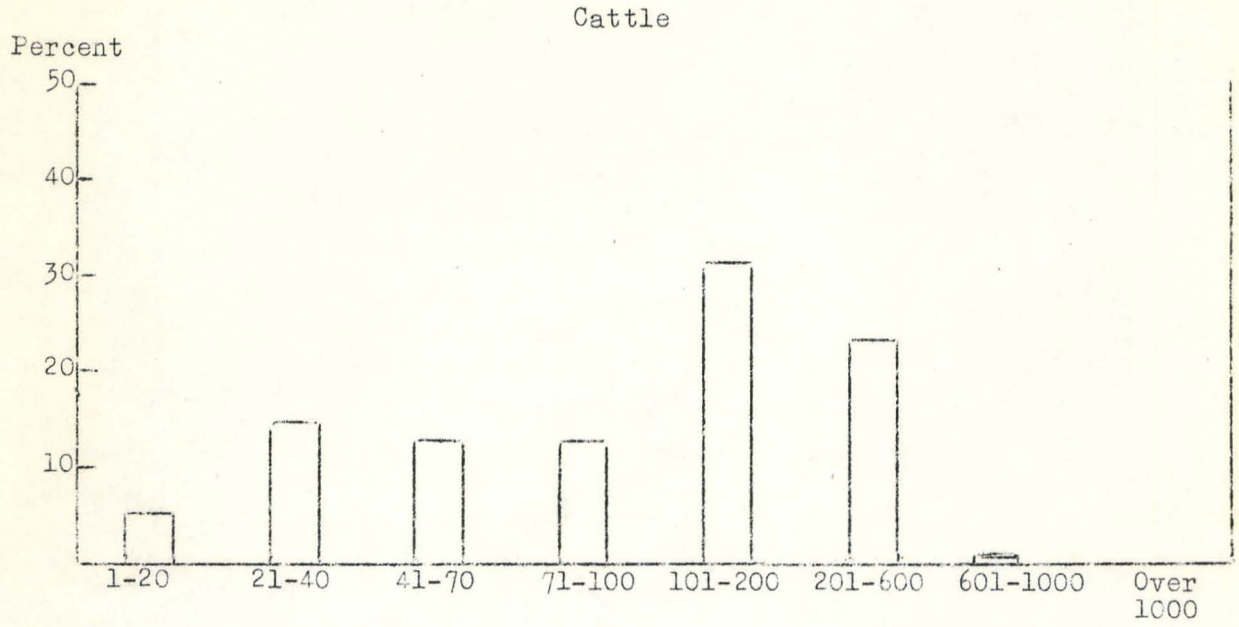


Figure 53.- Percent of total cattle and sheep months use on the Virginia City Grazing District used by the various size classes of livestock enterprises.



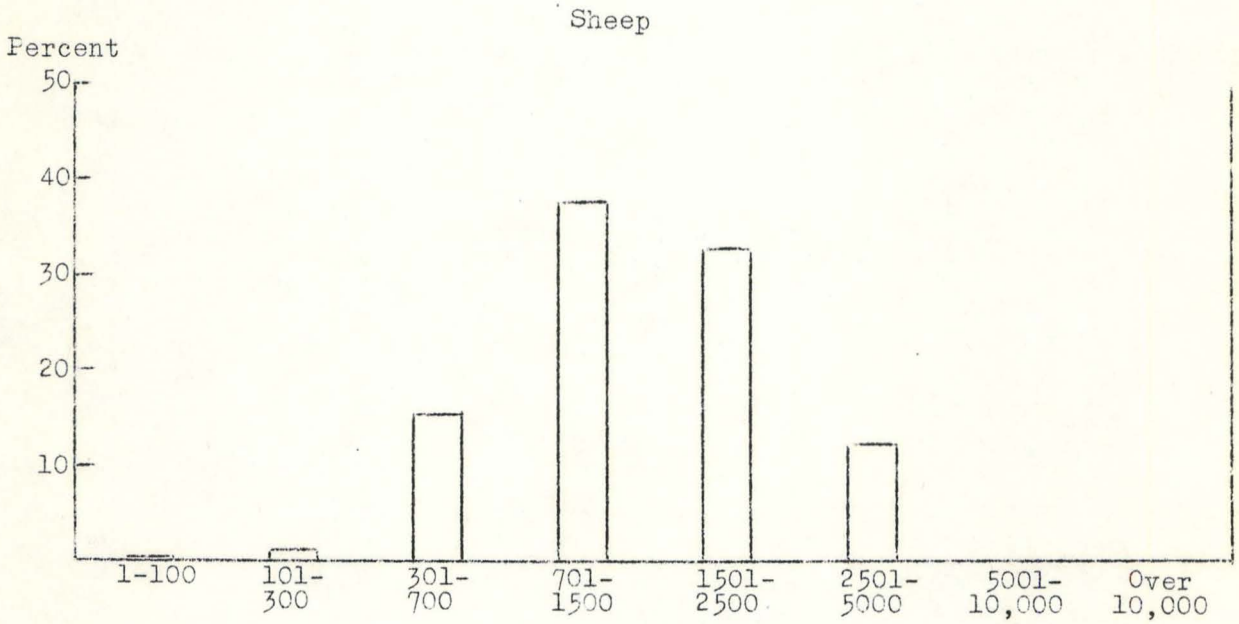
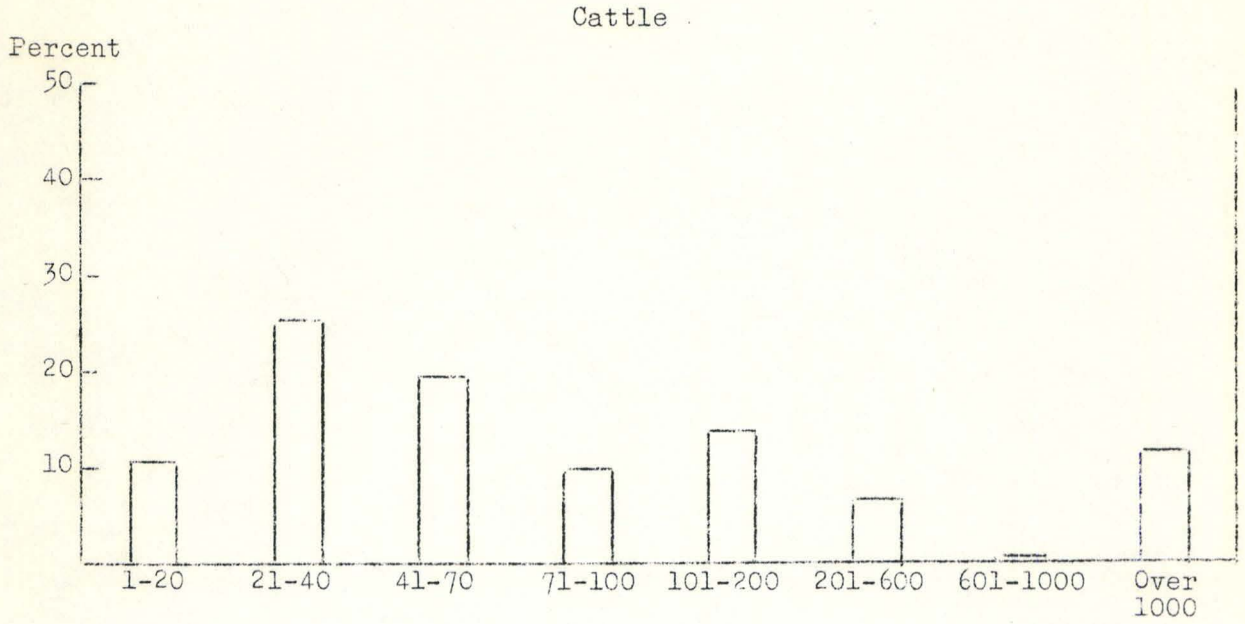


Figure 56.- Percent of total cattle and sheep months use on the Ashley National Forest used by the various size classes of livestock enterprises.



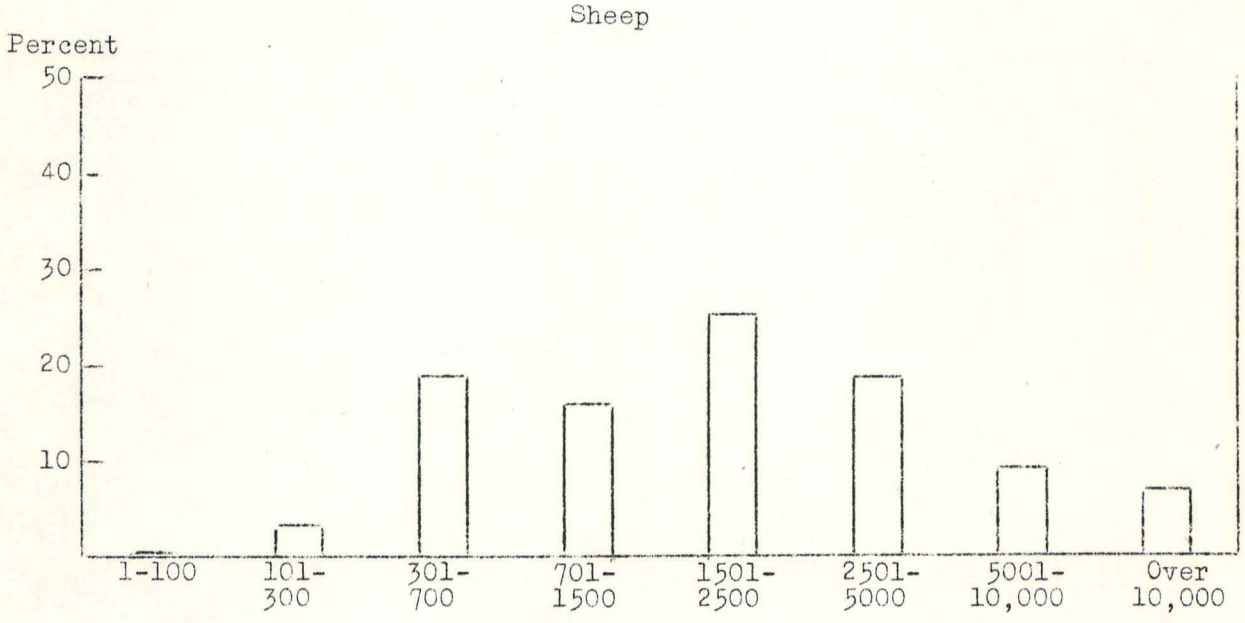
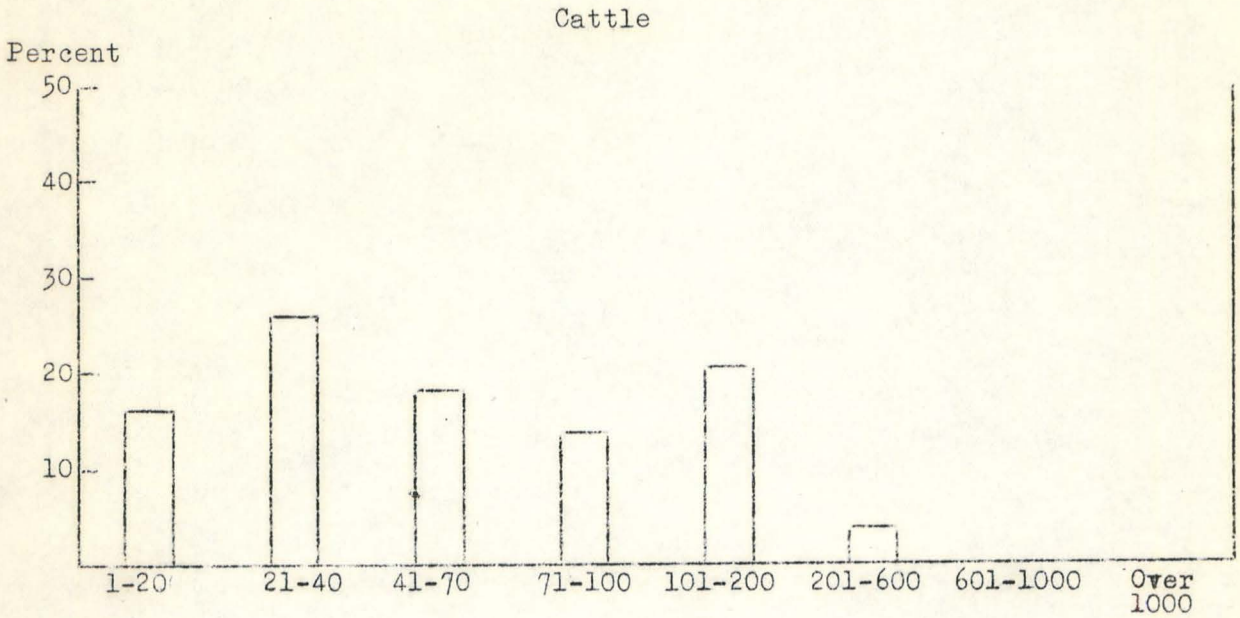


Figure 57.- Percent of total cattle and sheep months use on the Cache National Forest used by the various size classes of livestock enterprises.



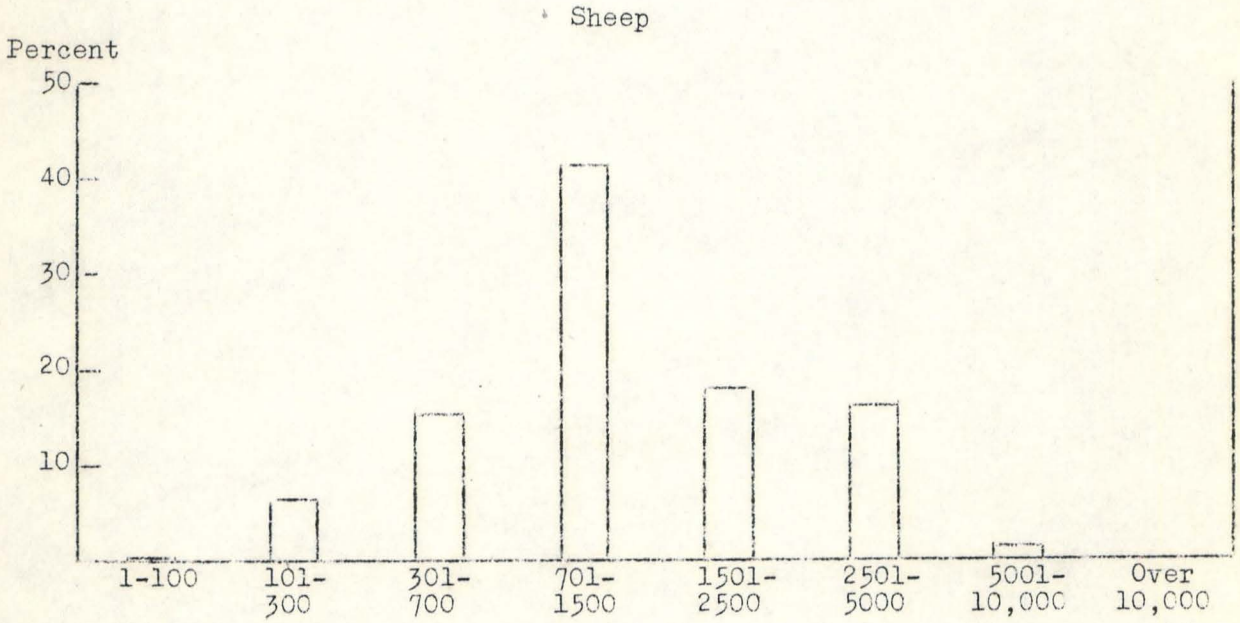
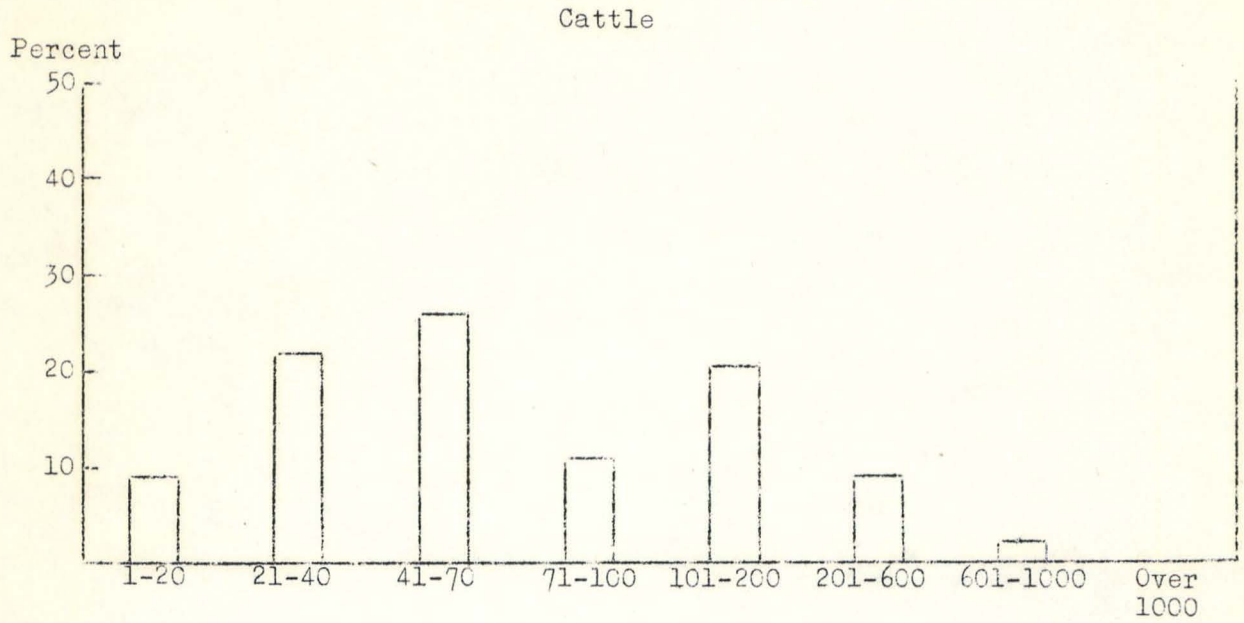


Figure 58.- Percent of total cattle and sheep months use on the Dixie National Forest used by the various size classes of livestock enterprises.



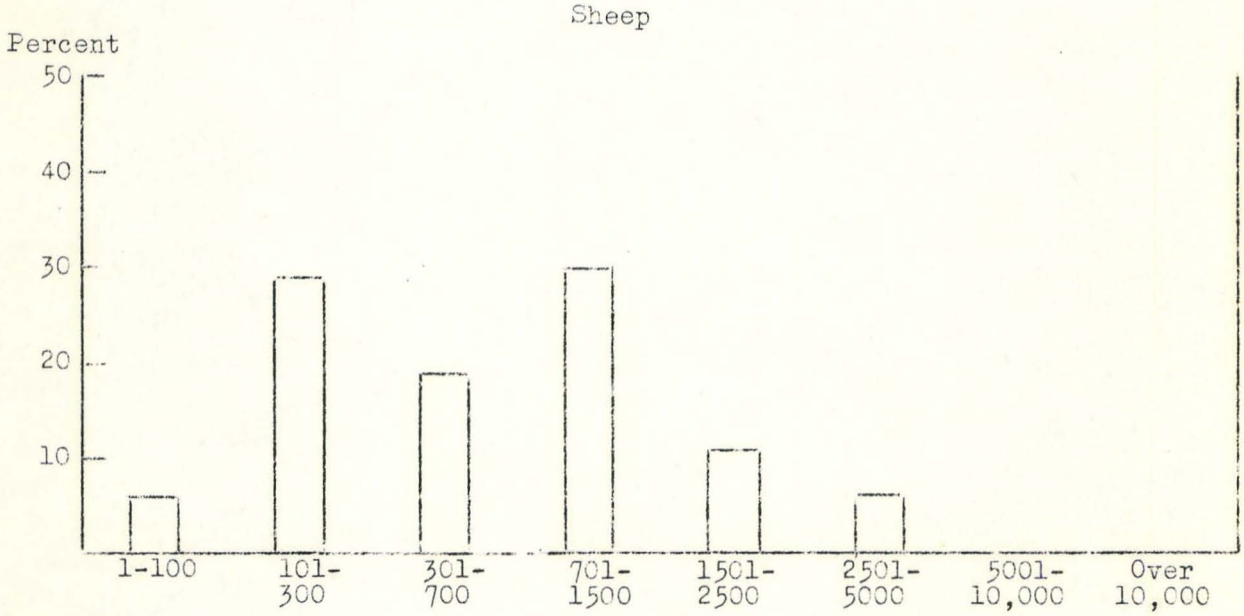
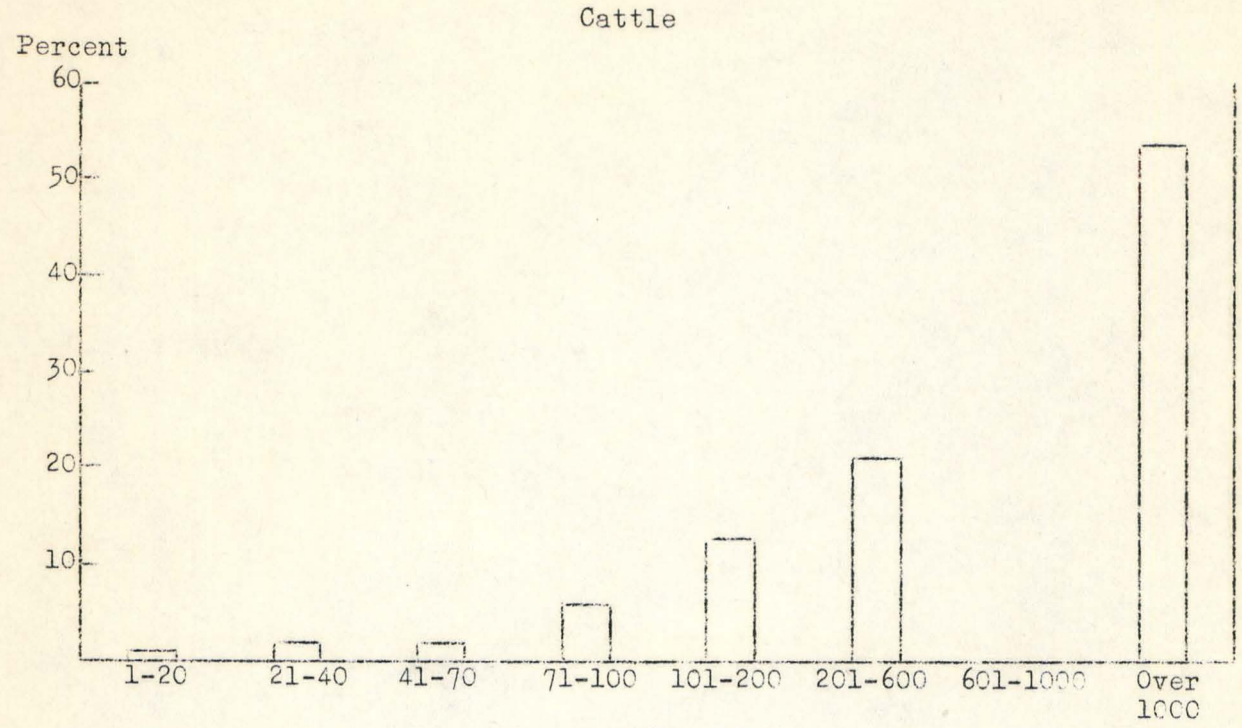


Figure 59.- Percent of total cattle and sheep months use on the Fishlake National Forest used by the various size classes of livestock enterprises.



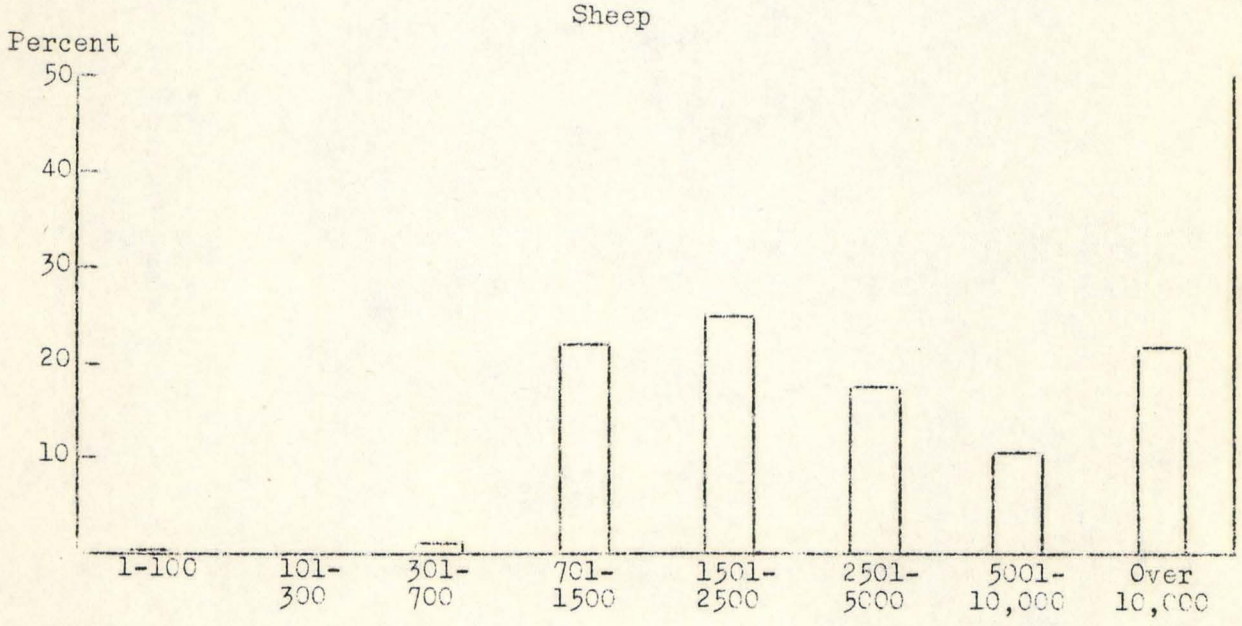
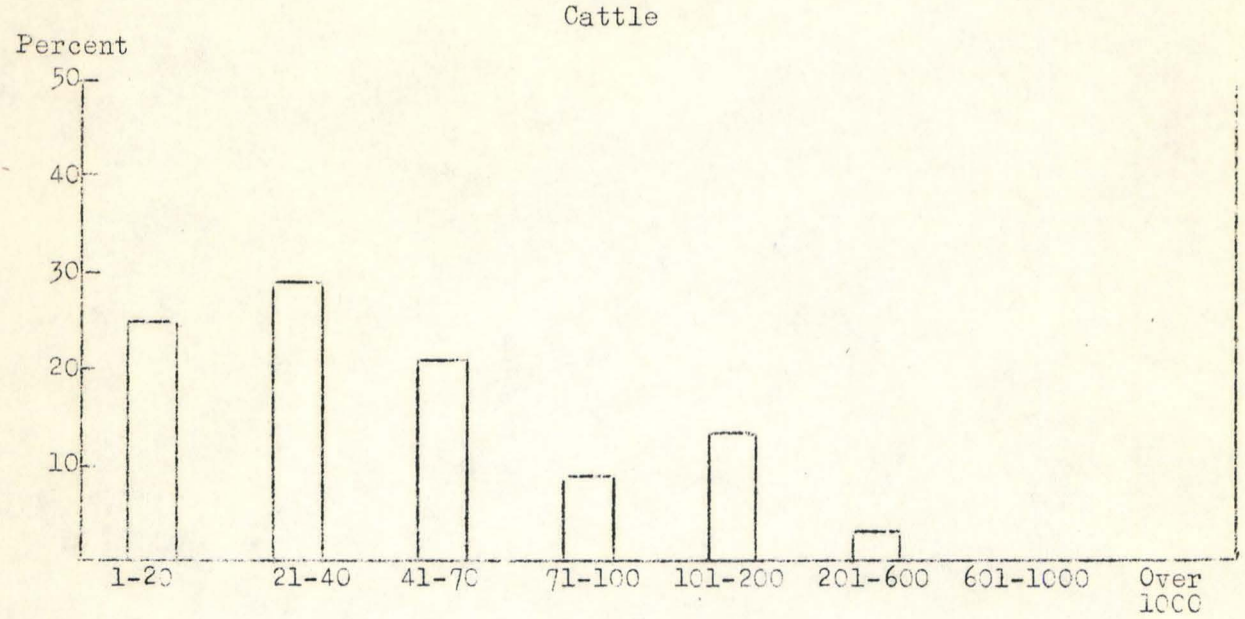


Figure 60.- Percent of total cattle and sheep months use on the LaSal National Forest used by the various size classes of livestock enterprises.



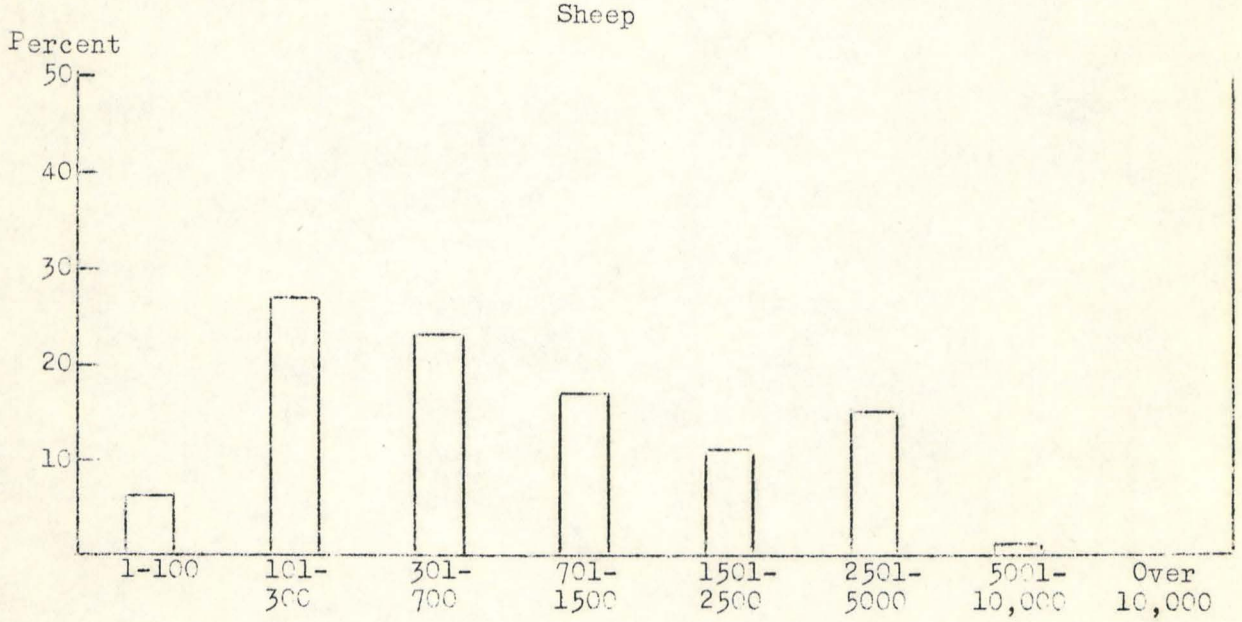


Figure 61.- Percent of total cattle and sheep months use on the Manti National Forest used by the various size classes of livestock enterprises.

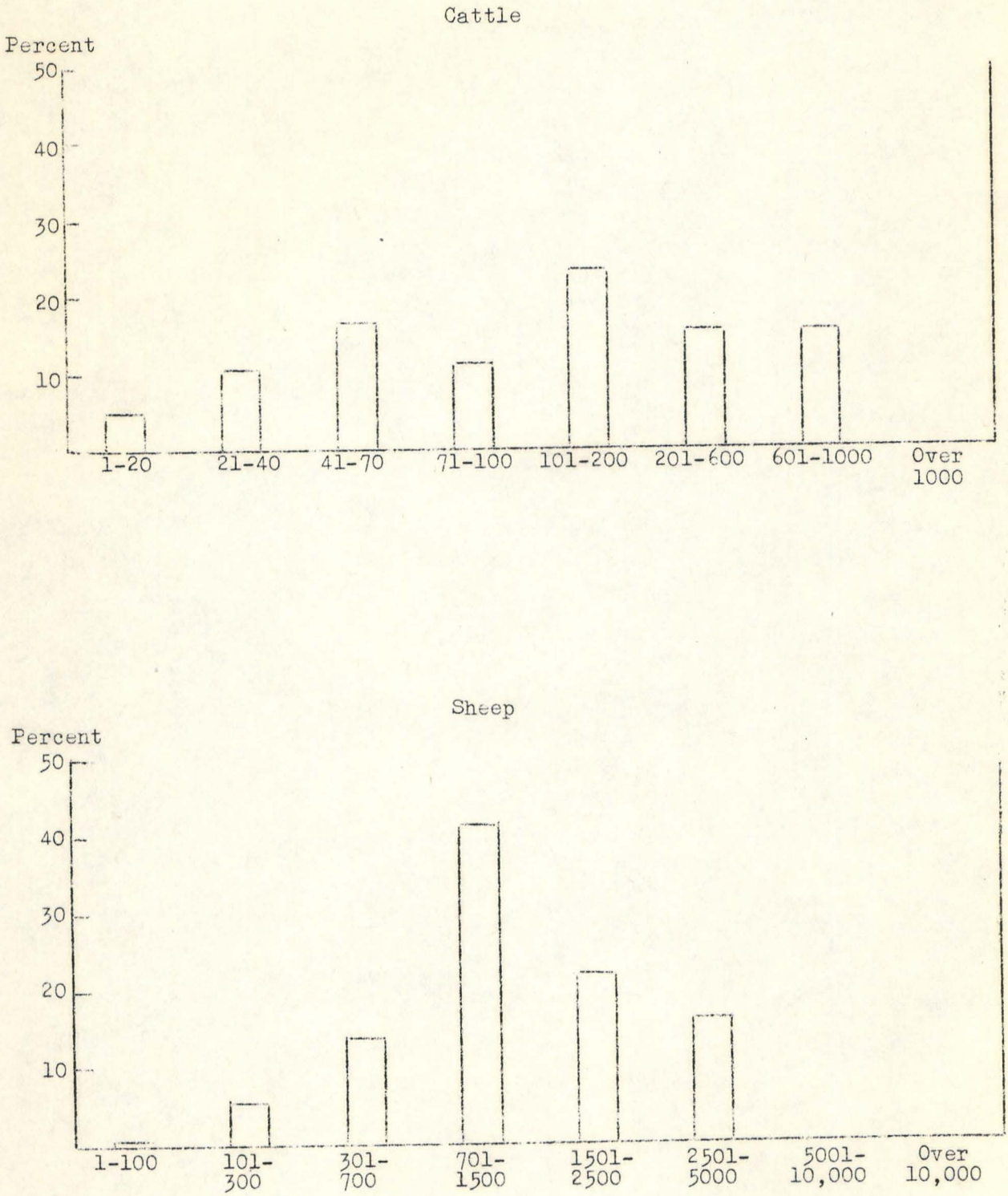
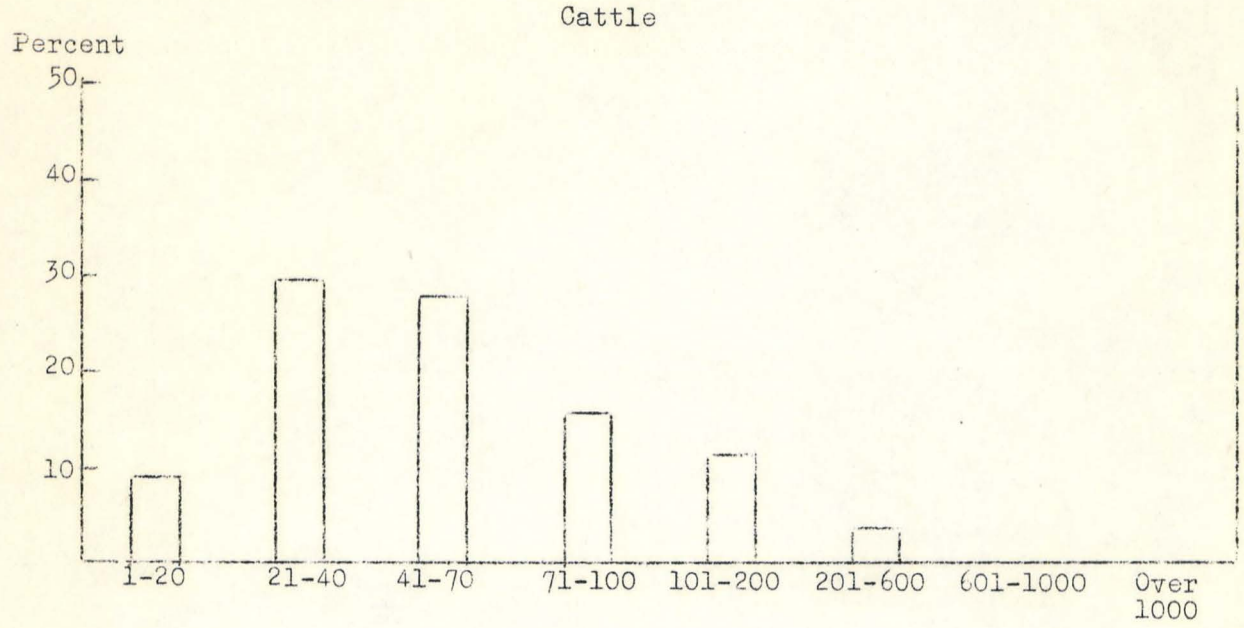


Figure 62.- Percent of total cattle and sheep months use on the Powell National Forest used by the various size classes of livestock enterprises.



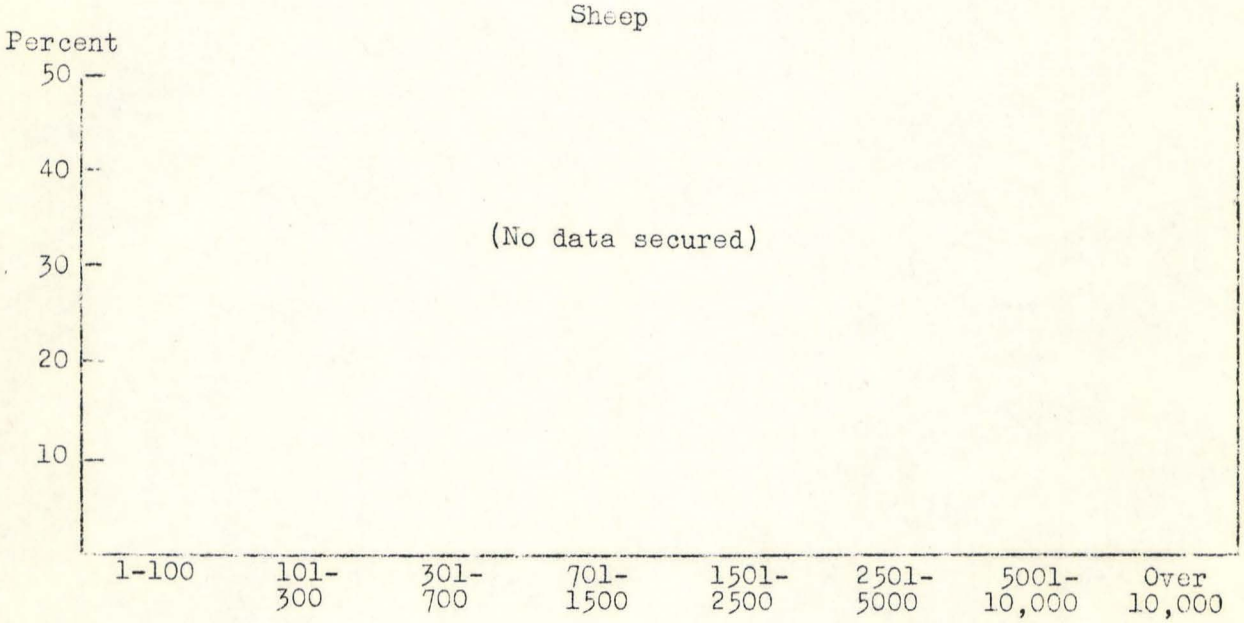


Figure 63.- Percent of total cattle and sheep months use on the Uinta National Forest used by the various size classes of livestock enterprises.

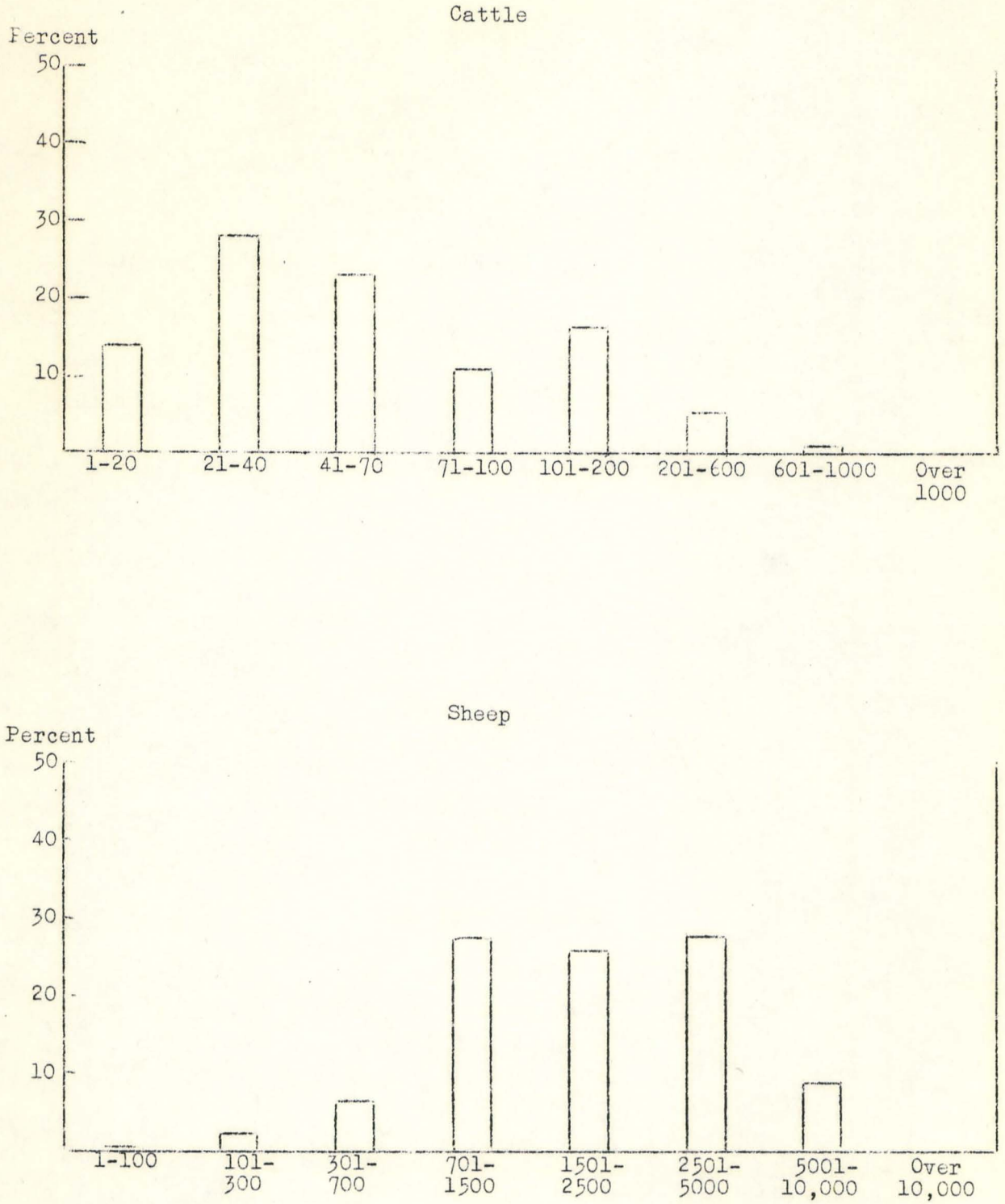
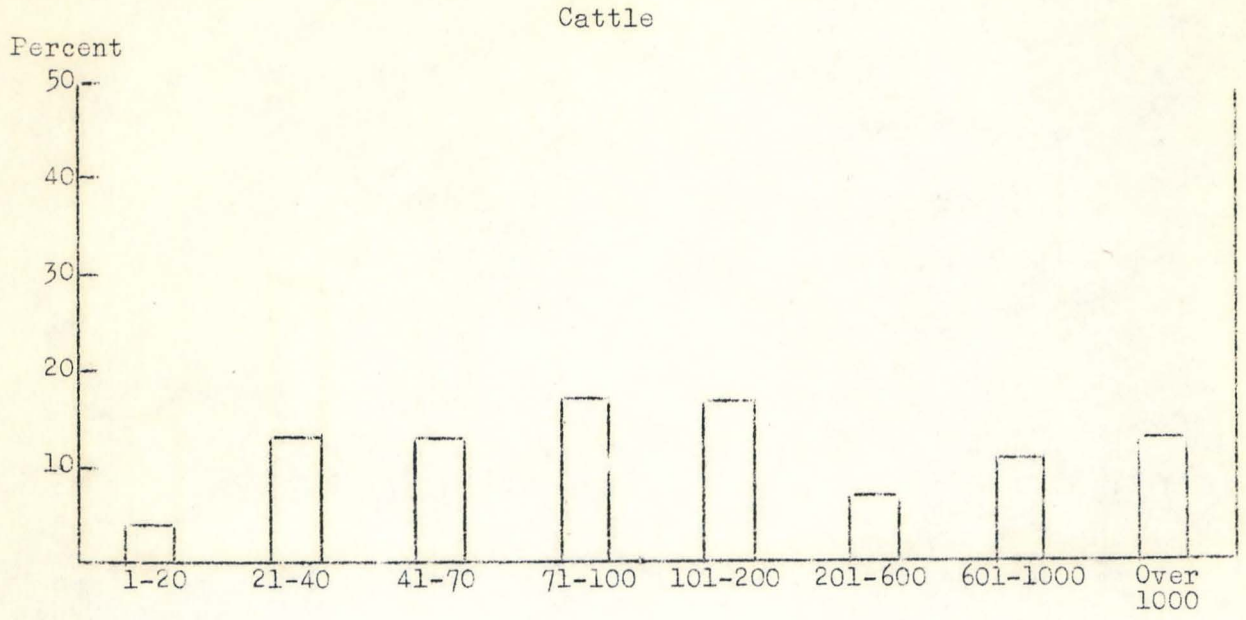


Figure 64.- Percent of total cattle and sheep months use on the Wasatch National Forest used by the various size classes of livestock enterprises.



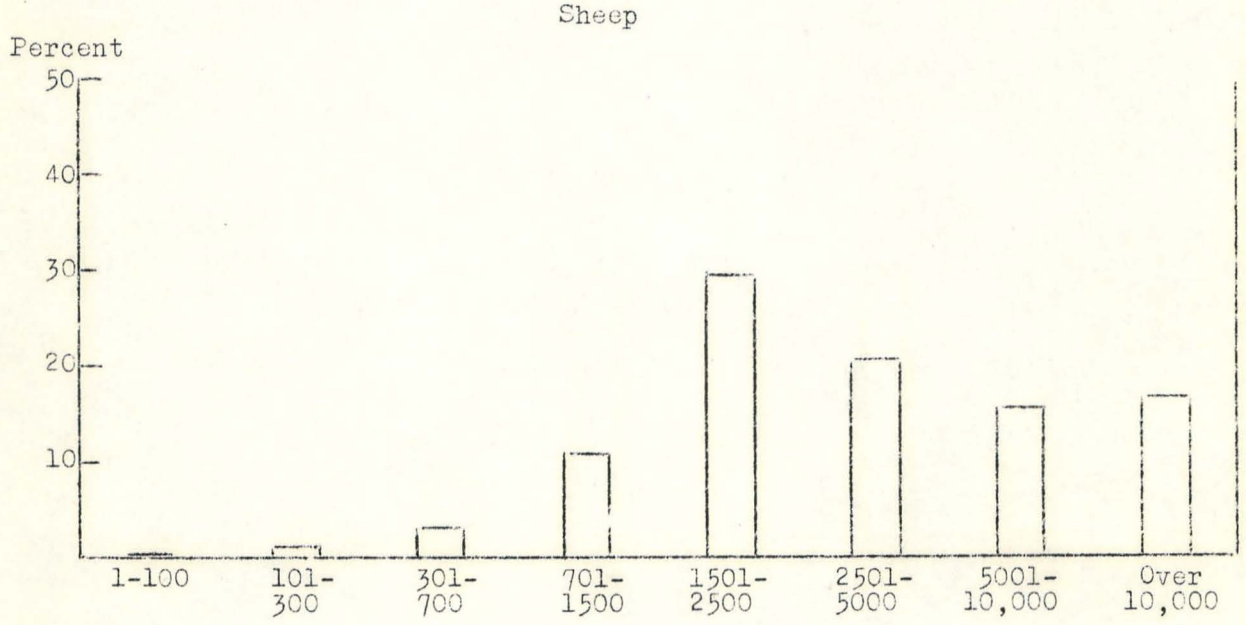
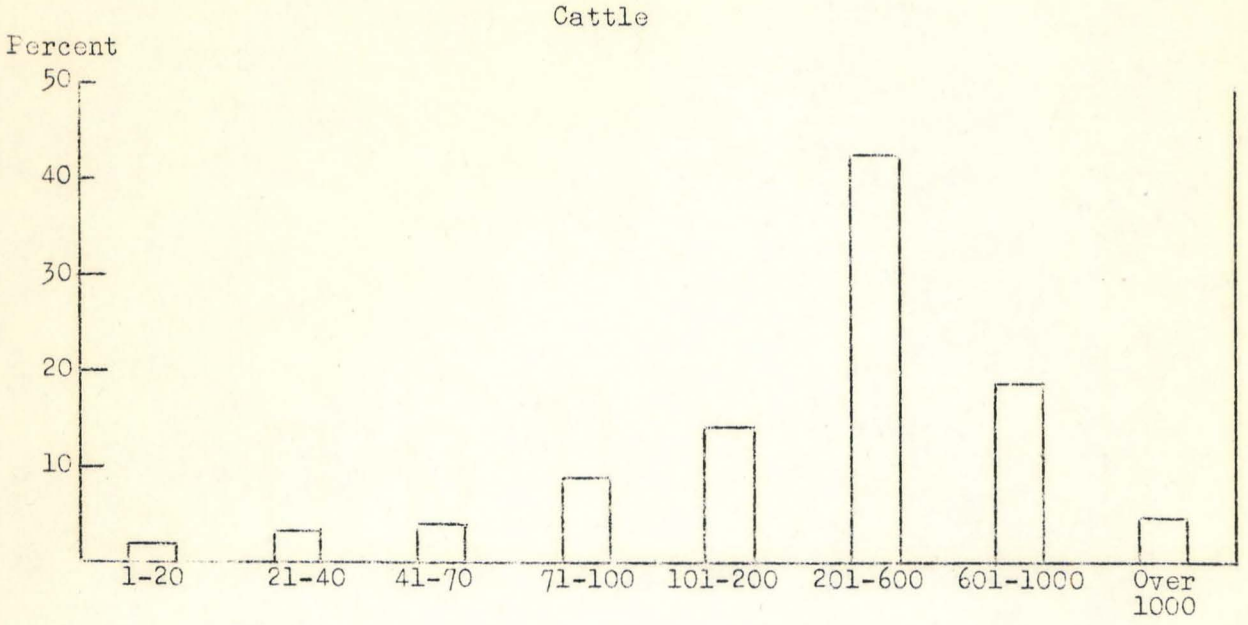


Figure 65.- Percent of total cattle and sheep months use on the Bonneville Grazing District used by the various size classes of livestock enterprises.



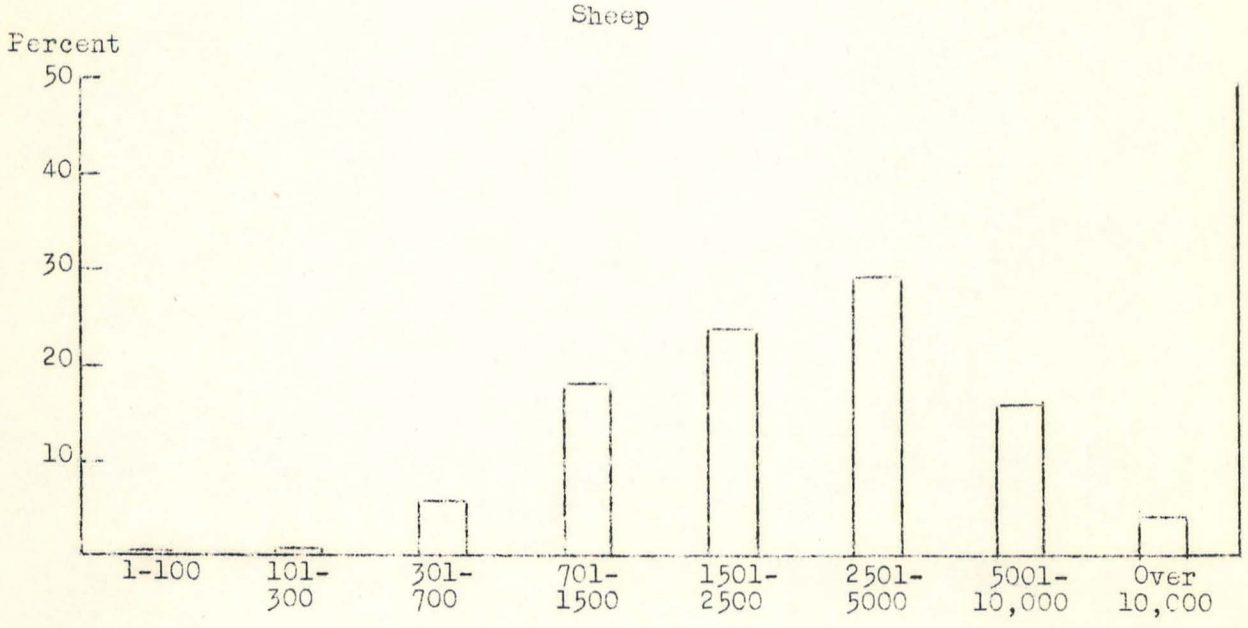
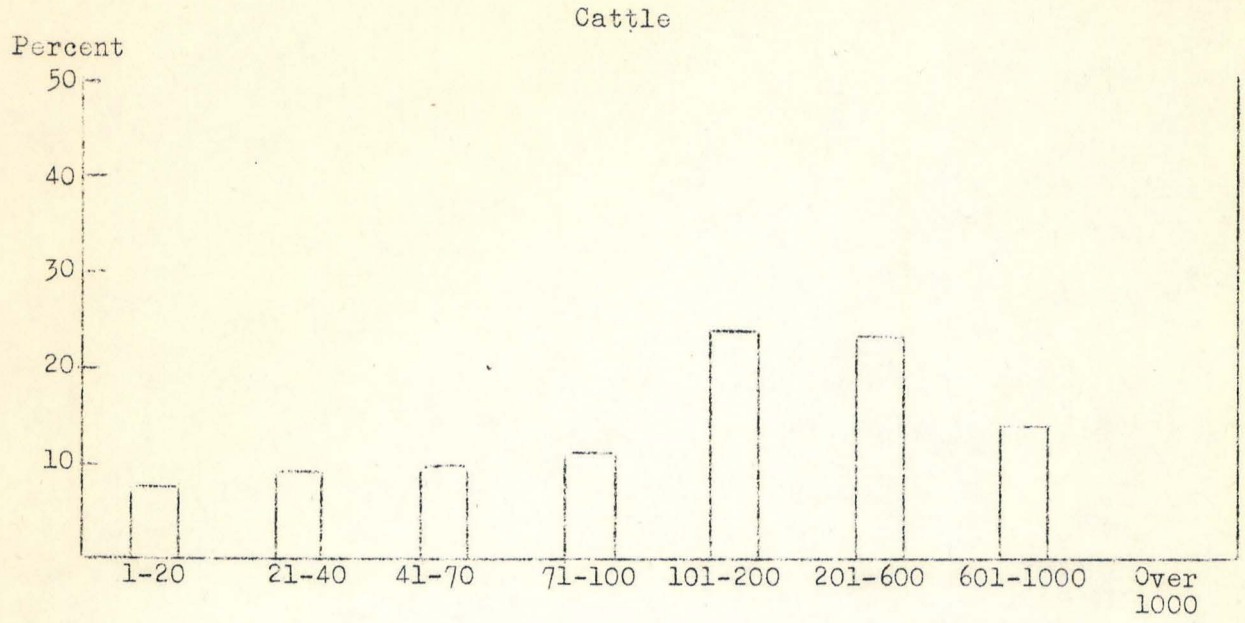


Figure 66.- Percent of total cattle and sheep months use on the Duchesne Grazing District used by the various size classes of livestock enterprises.



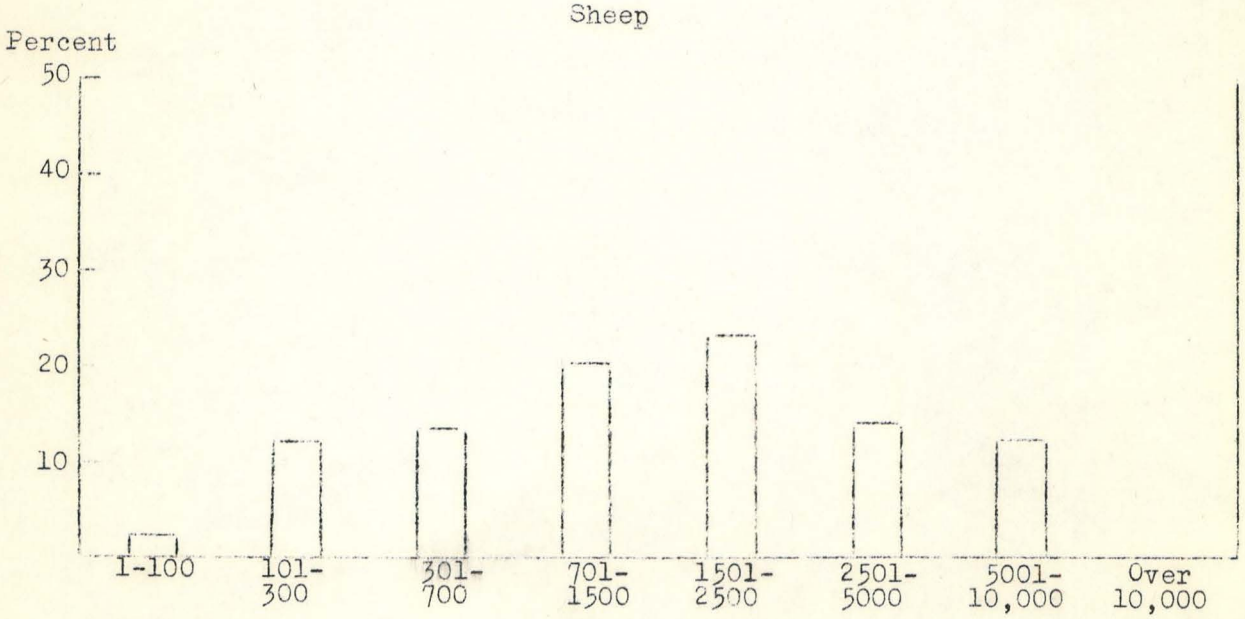
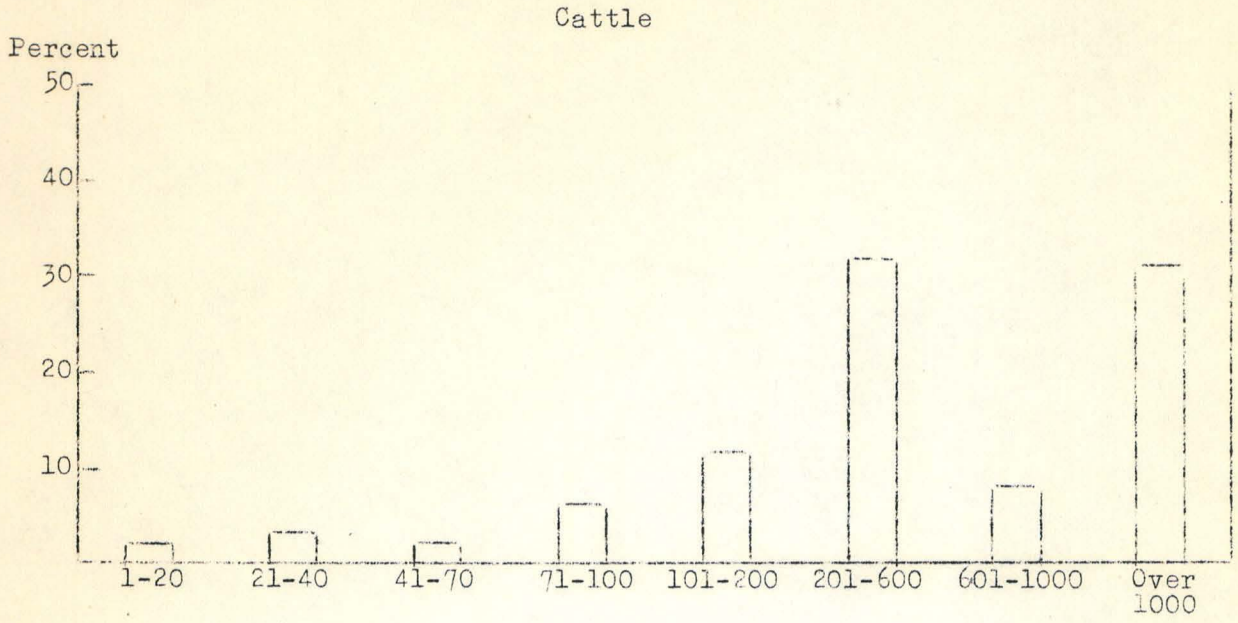


Figure 67.- Percent of total cattle and sheep months use on the Escalante Grazing District used by the various size classes of livestock enterprises.



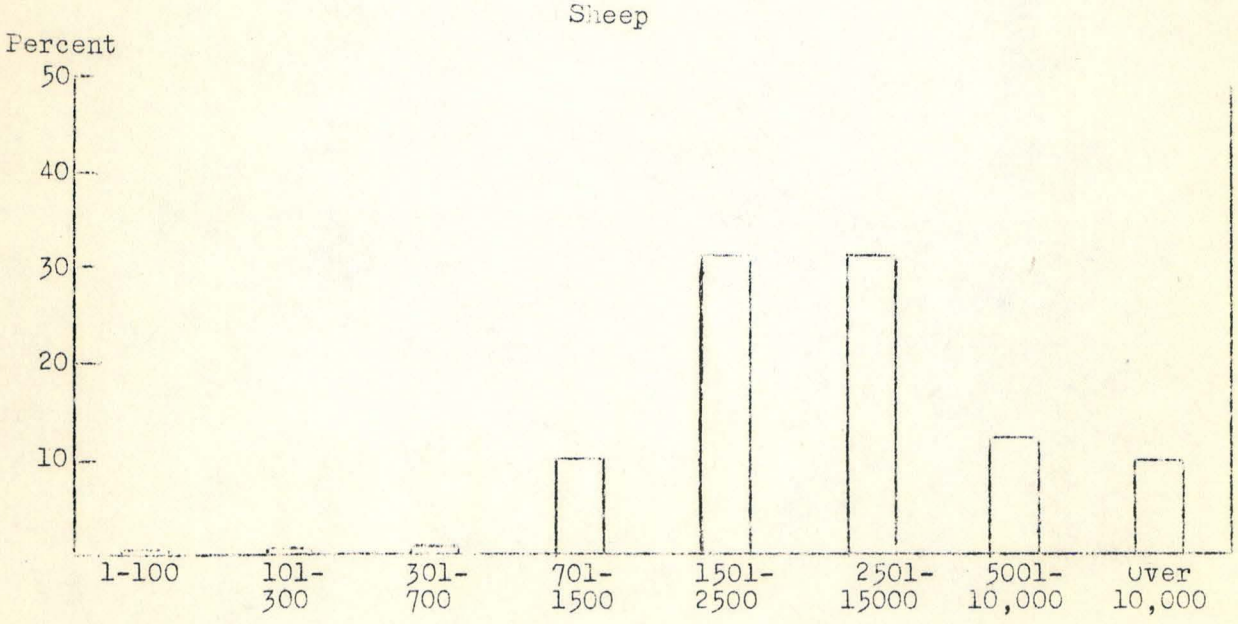


Figure 68.- Percent of total cattle and sheep months use on the Monticello and Grand Grazing District used by the various size classes of livestock enterprises.

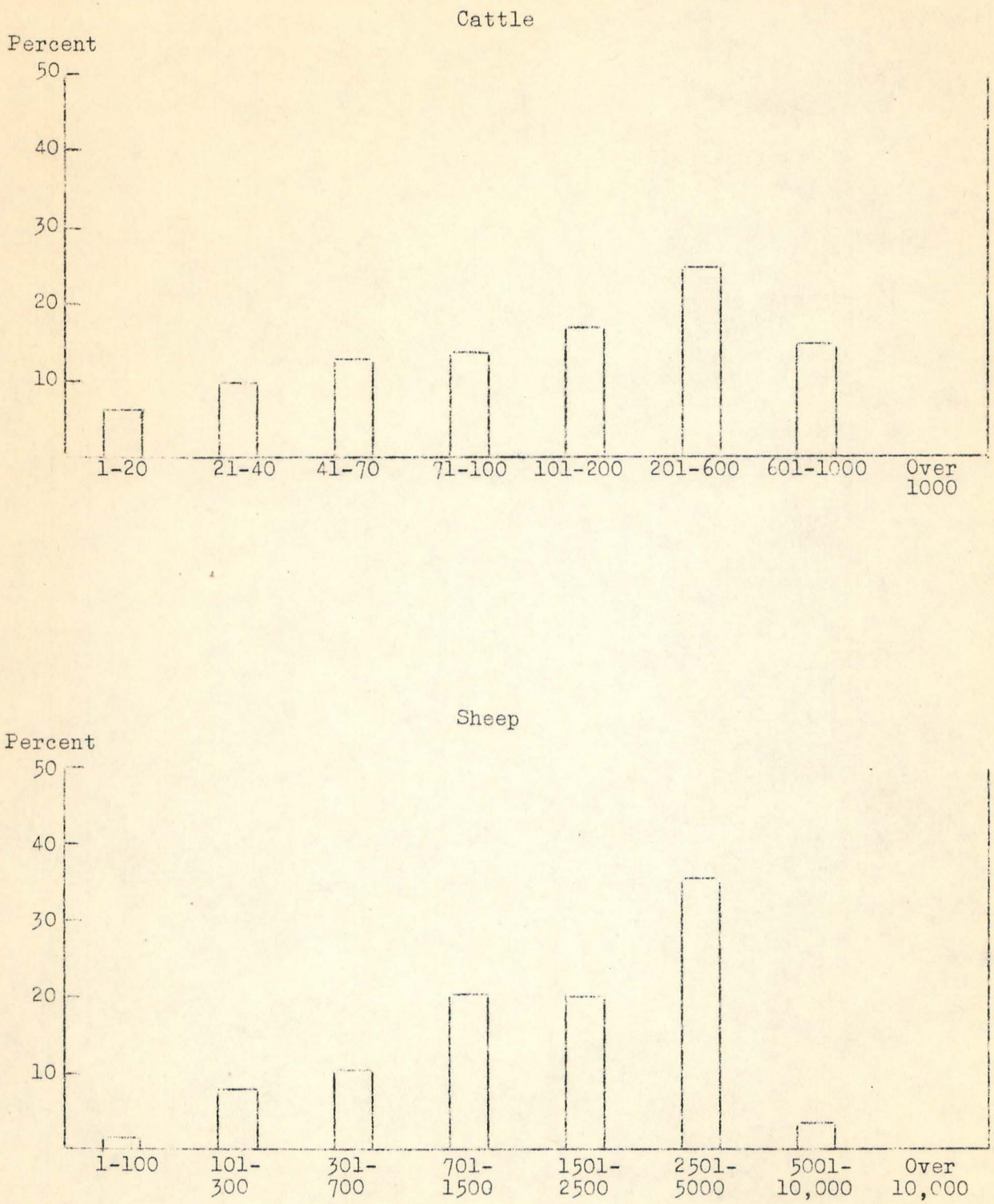
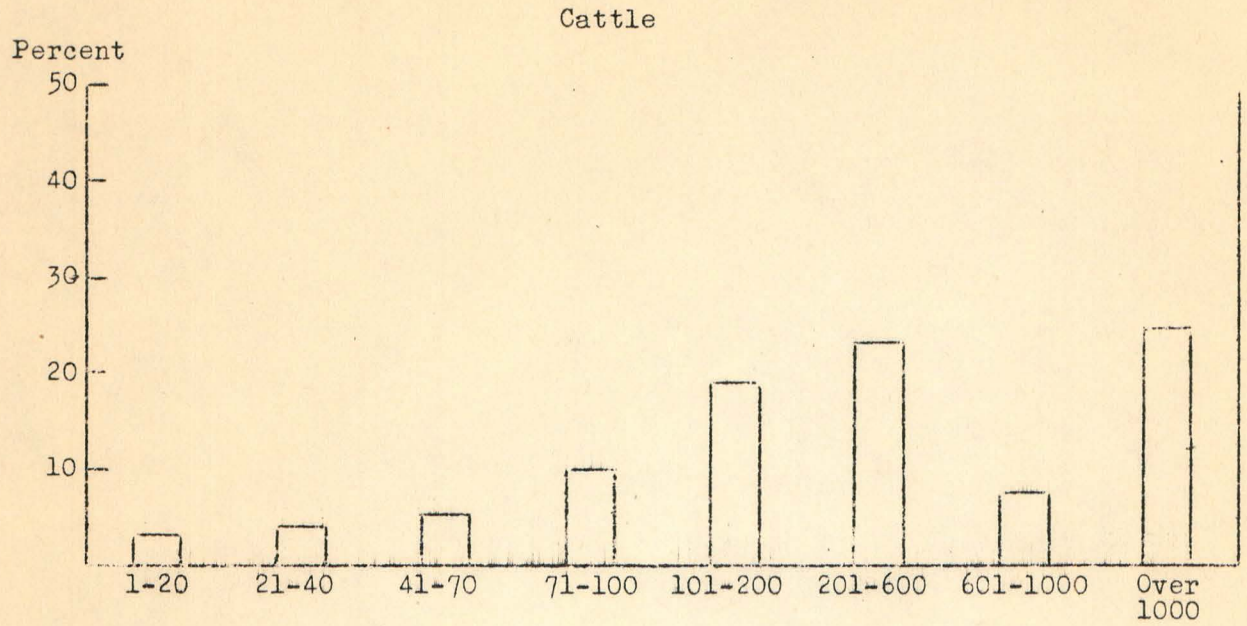


Figure 69.- Percent of total cattle and sheep months use on the Pahvant Grazing District used by the various size classes of livestock enterprises.



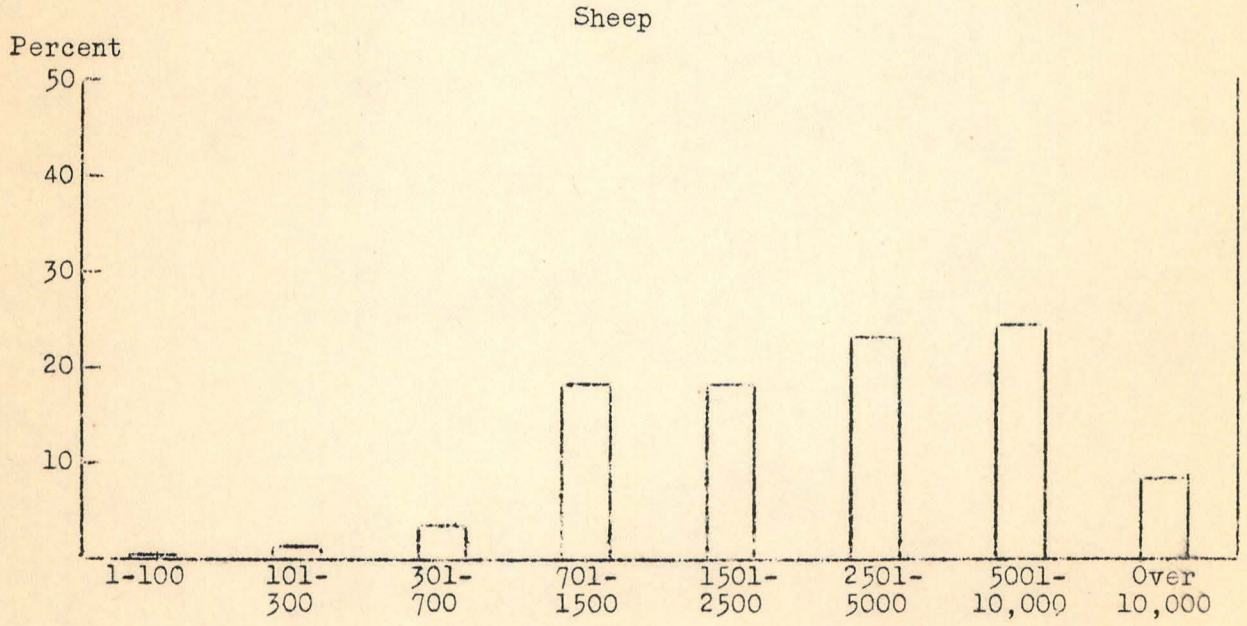
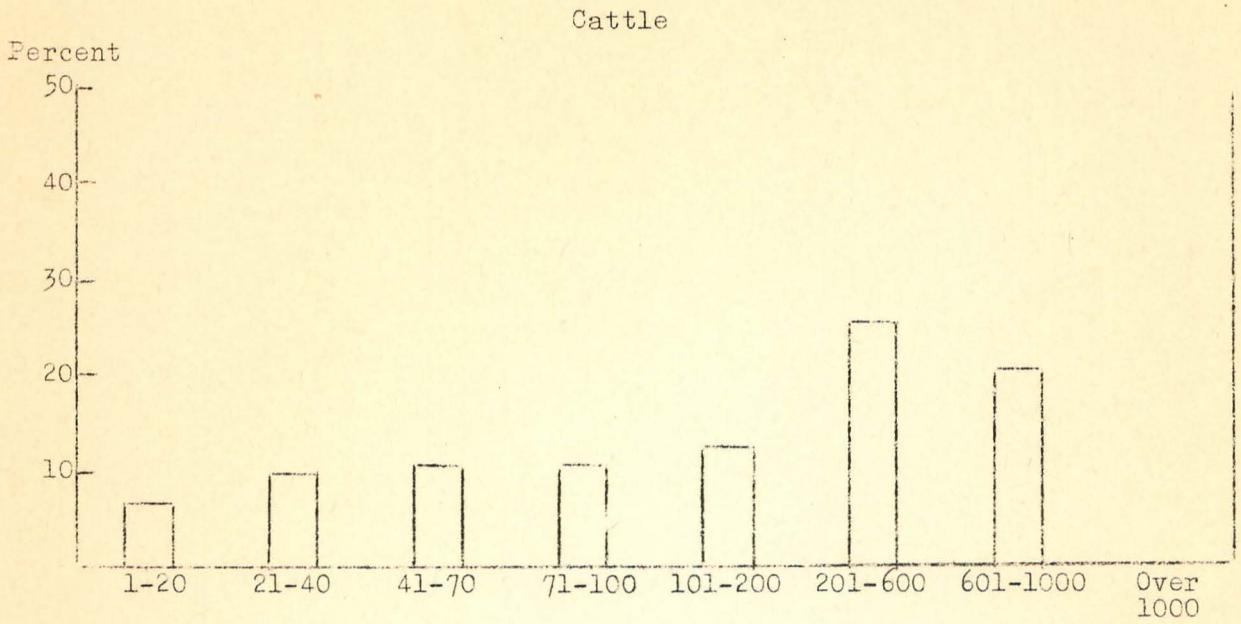


Figure 70.- Percent of total cattle and sheep months use on the Promontory Grazing District used by the various size classes of livestock enterprises.



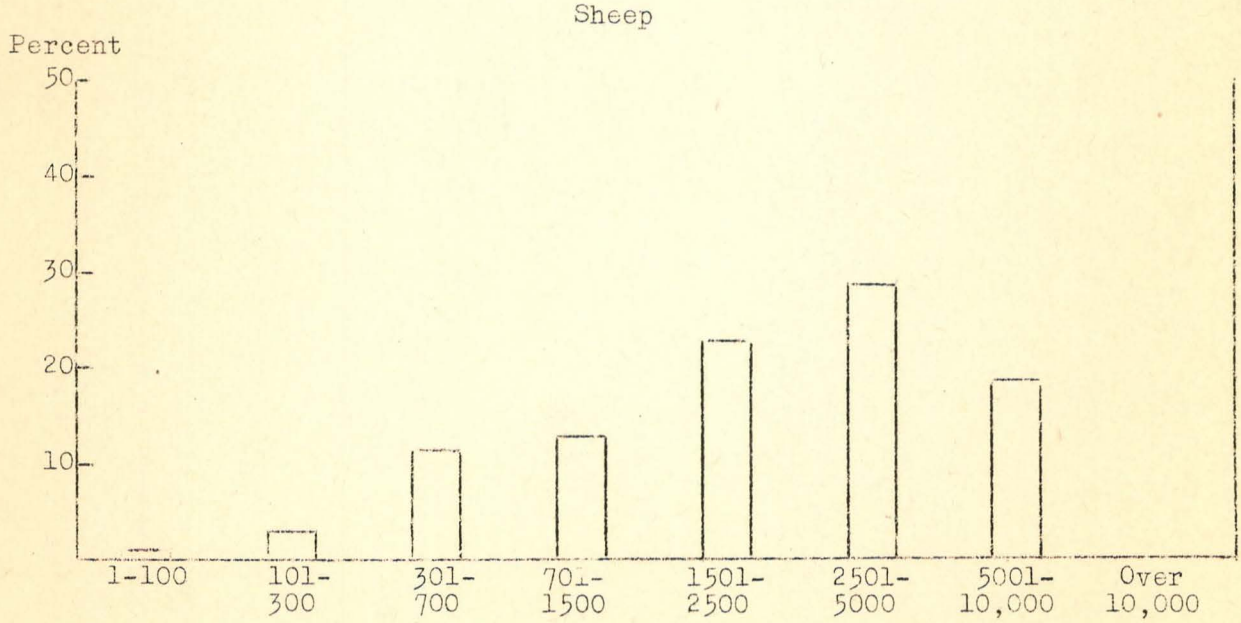


Figure 71.- Percent of total cattle and sheep months use on the San Raphael Grazing District used by the various size classes of livestock enterprises.

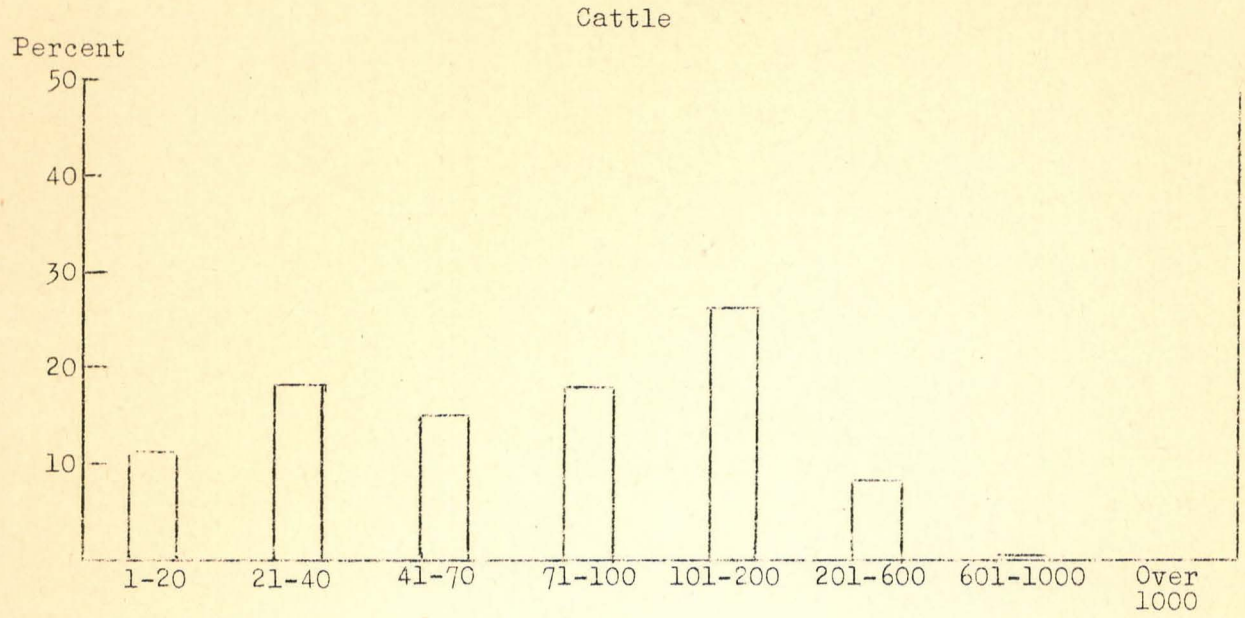
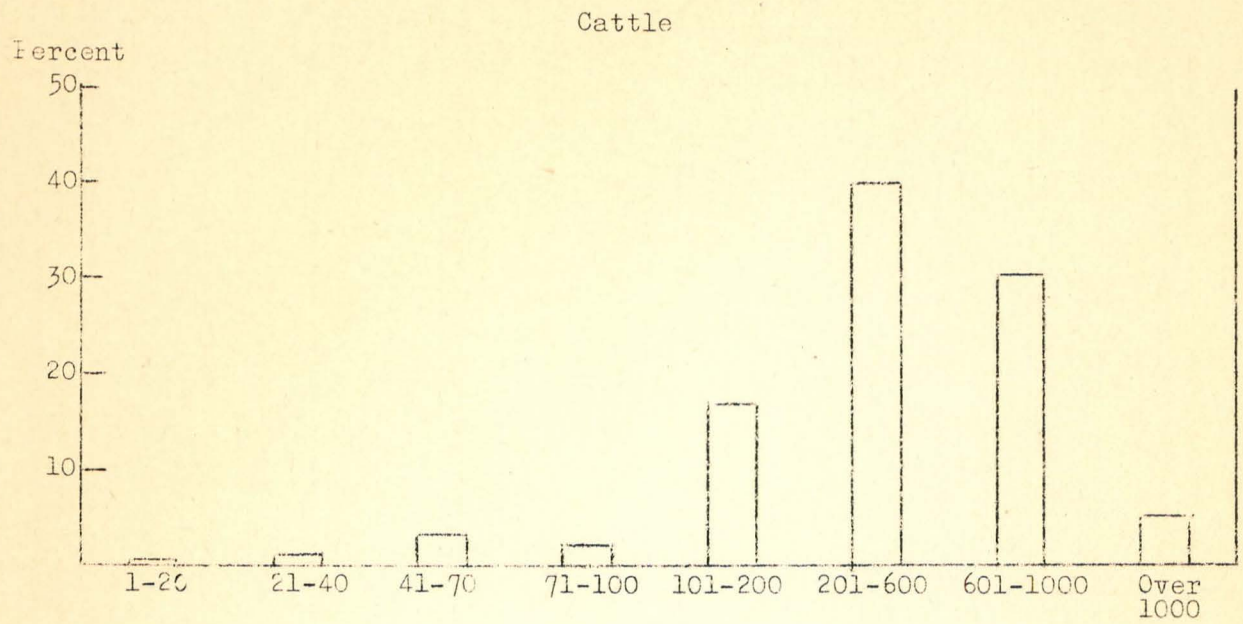


Figure 72.- Percent of total cattle and sheep months use on the Virgin Grazing District used by the various size classes of livestock enterprises.



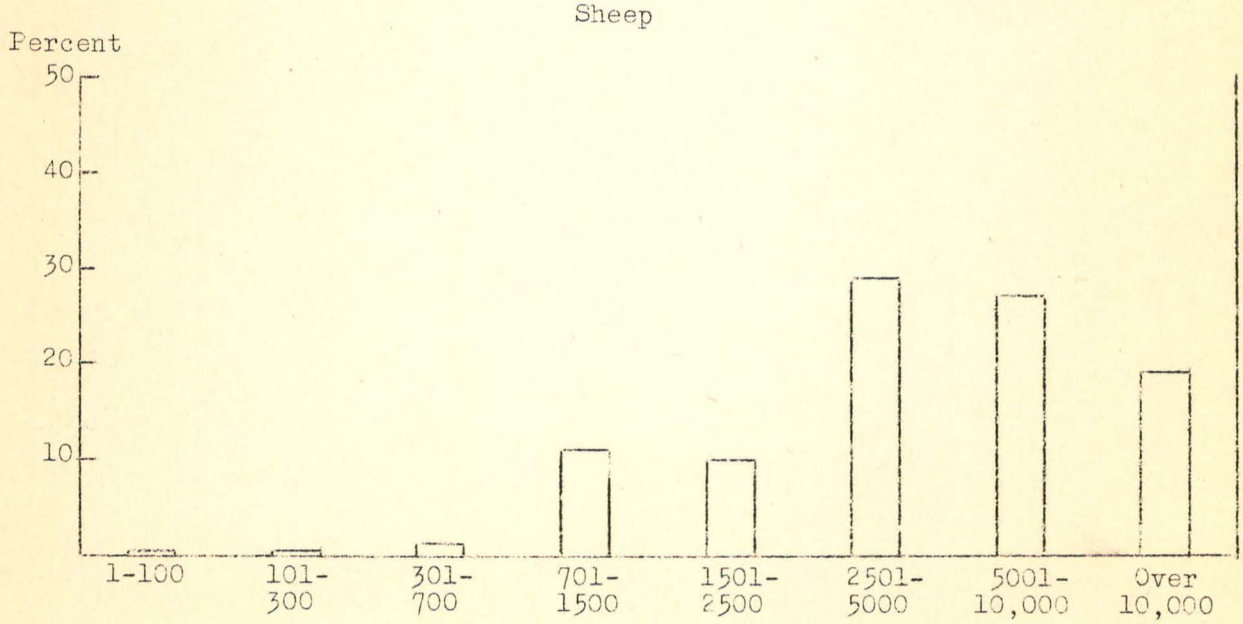
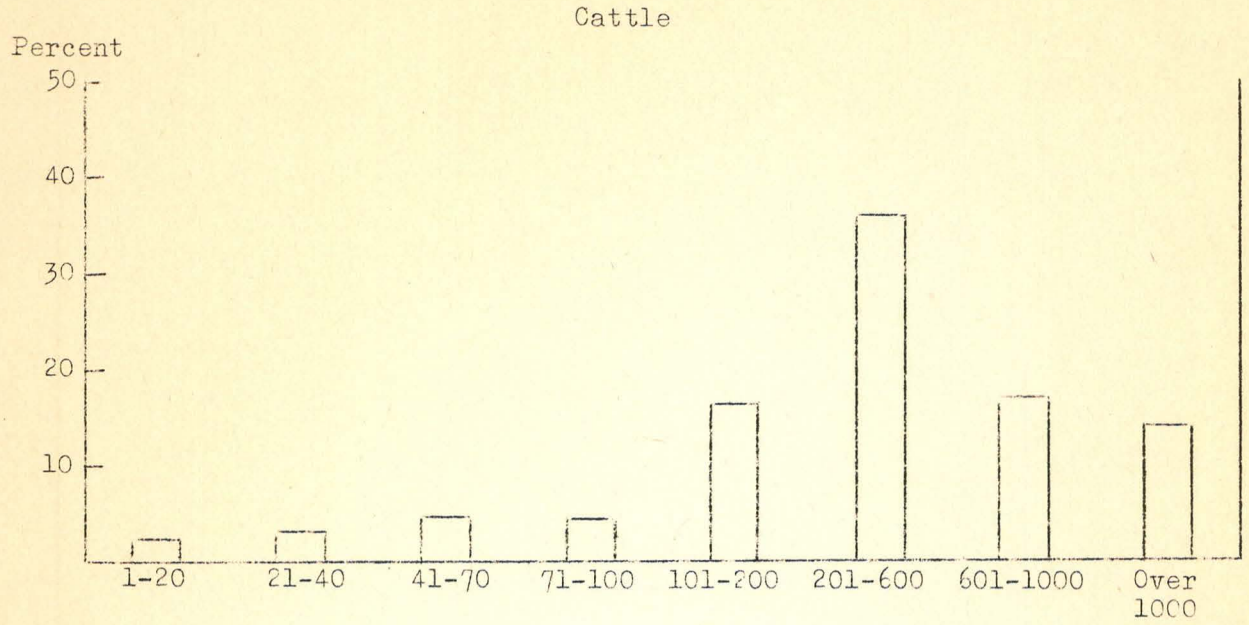


Figure 73.- Percent of total cattle and sheep months use on the national forests of Wyoming used by the various size classes of livestock enterprises.



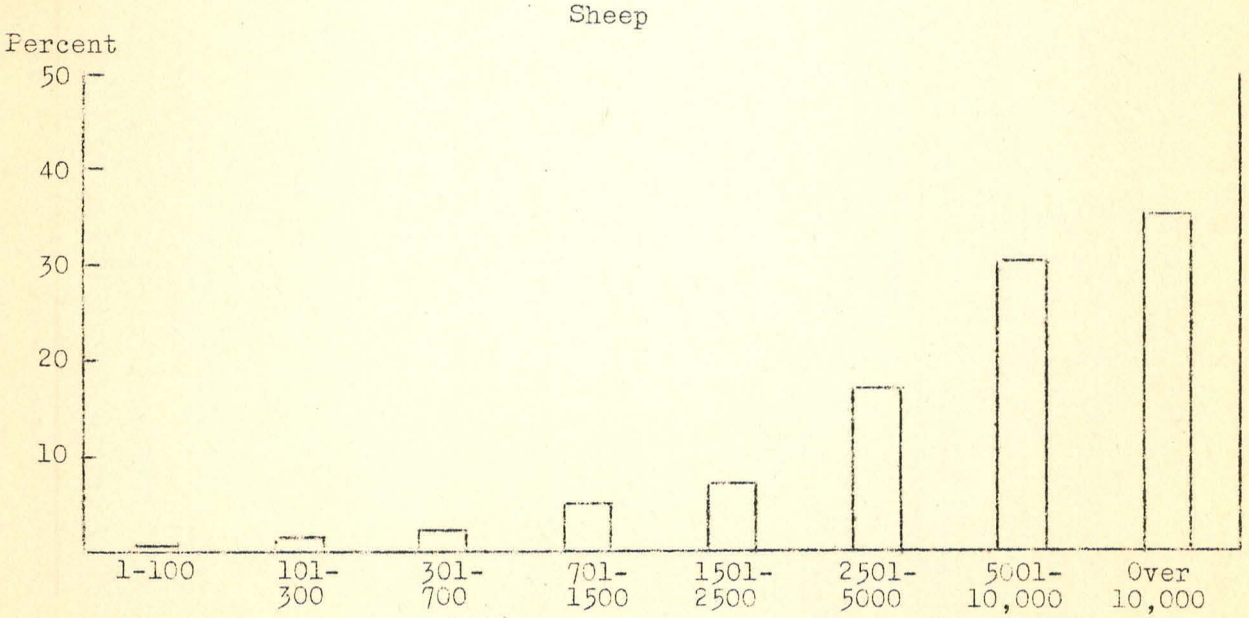
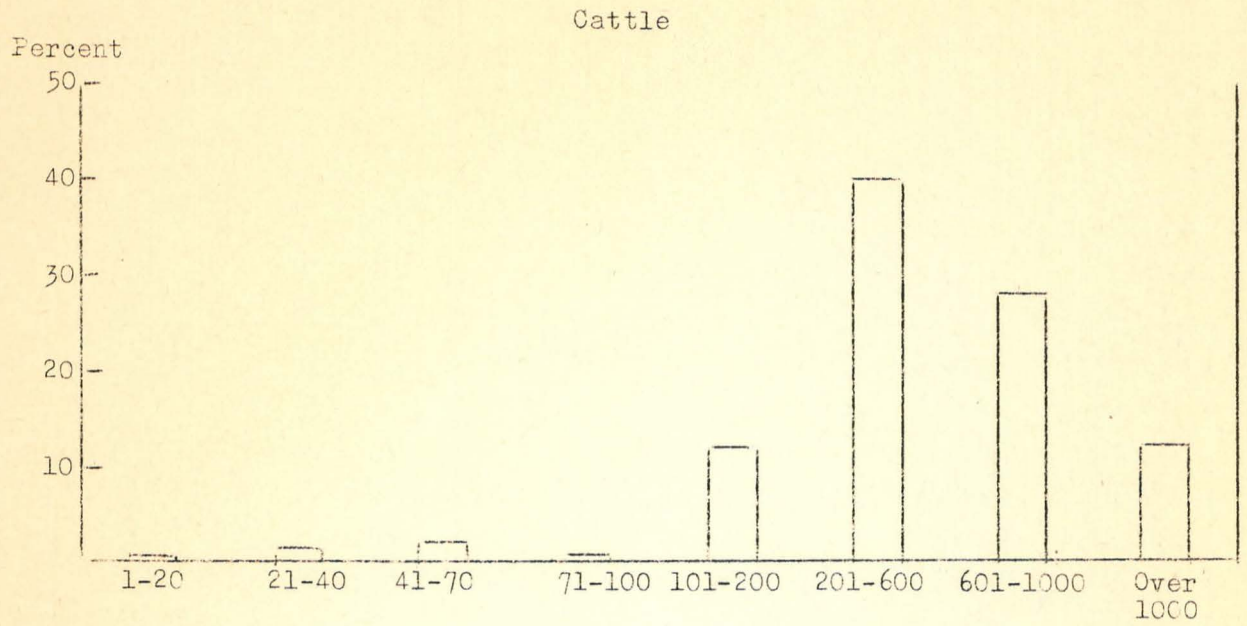


Figure 74.- Percent of total cattle and sheep months use on the grazing districts of Wyoming used by the various size classes of livestock enterprises.



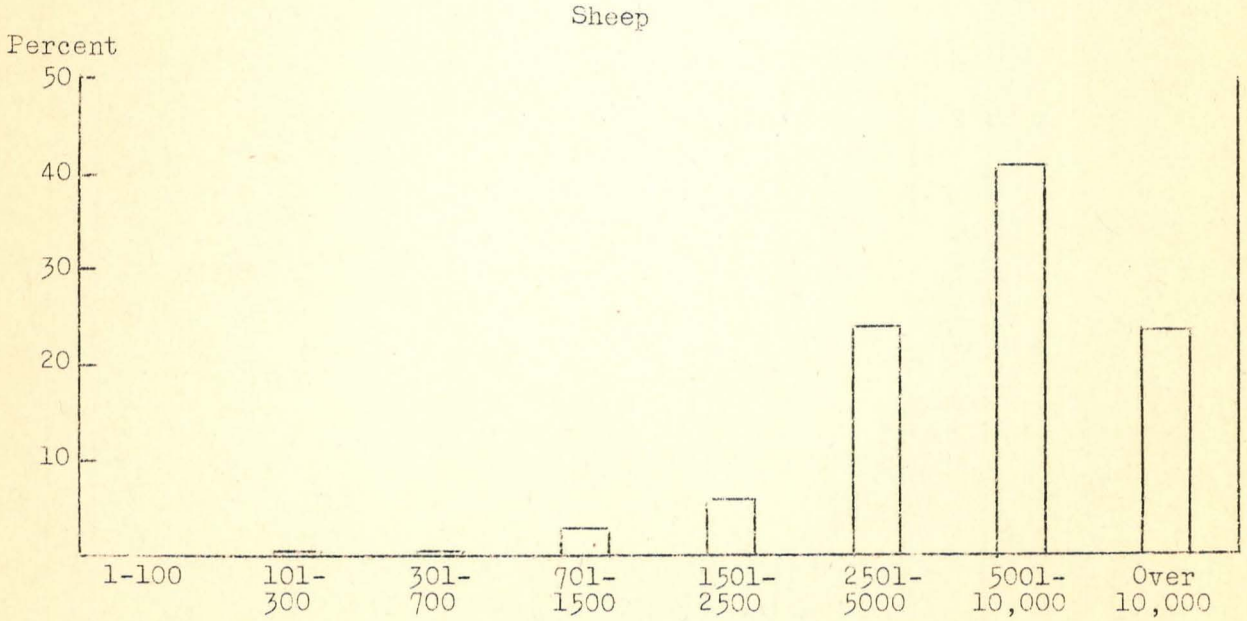
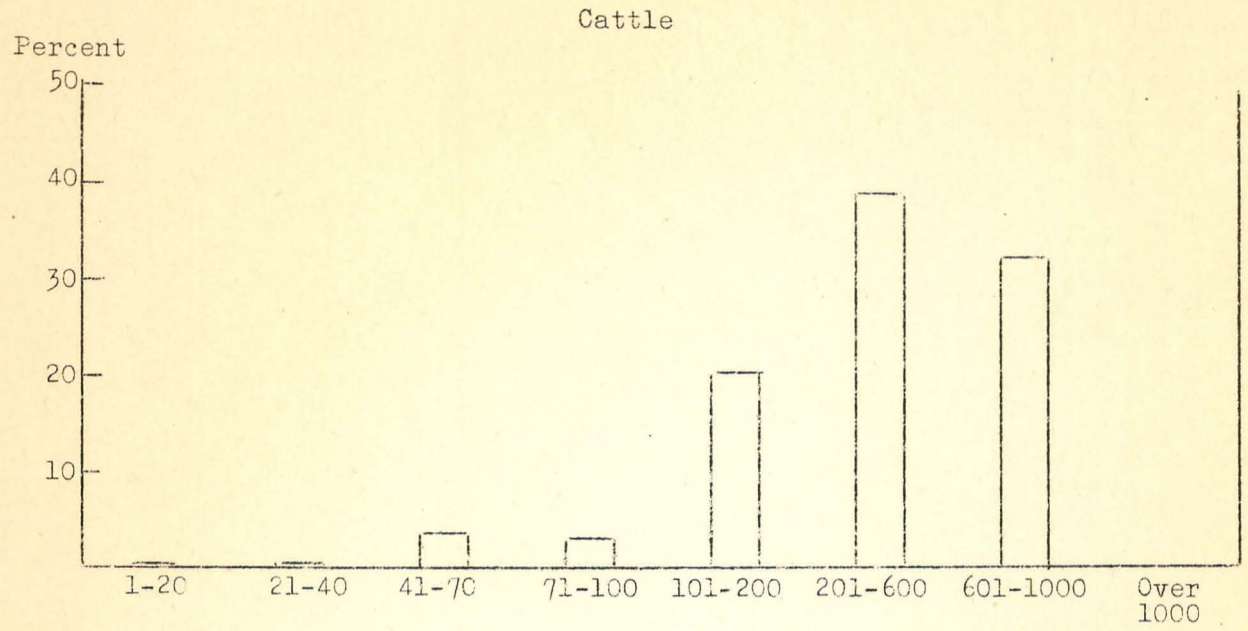


Figure 75.- Percent of total cattle and sheep months use on the Bridger National Forest used by the various size classes of livestock enterprises.



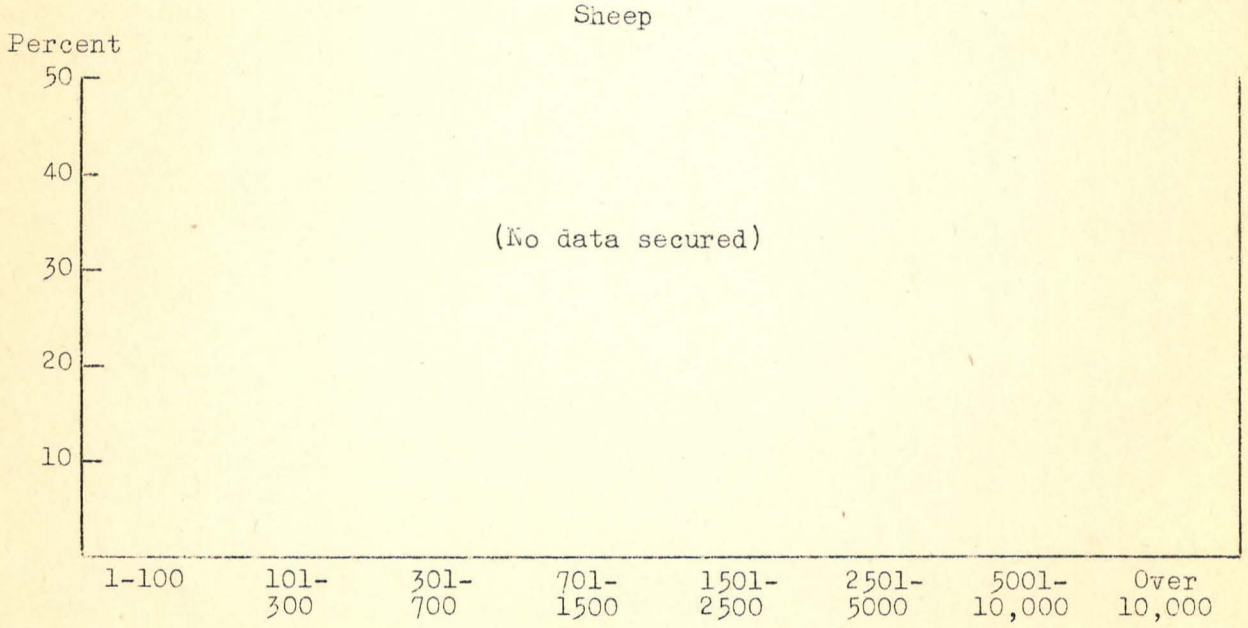
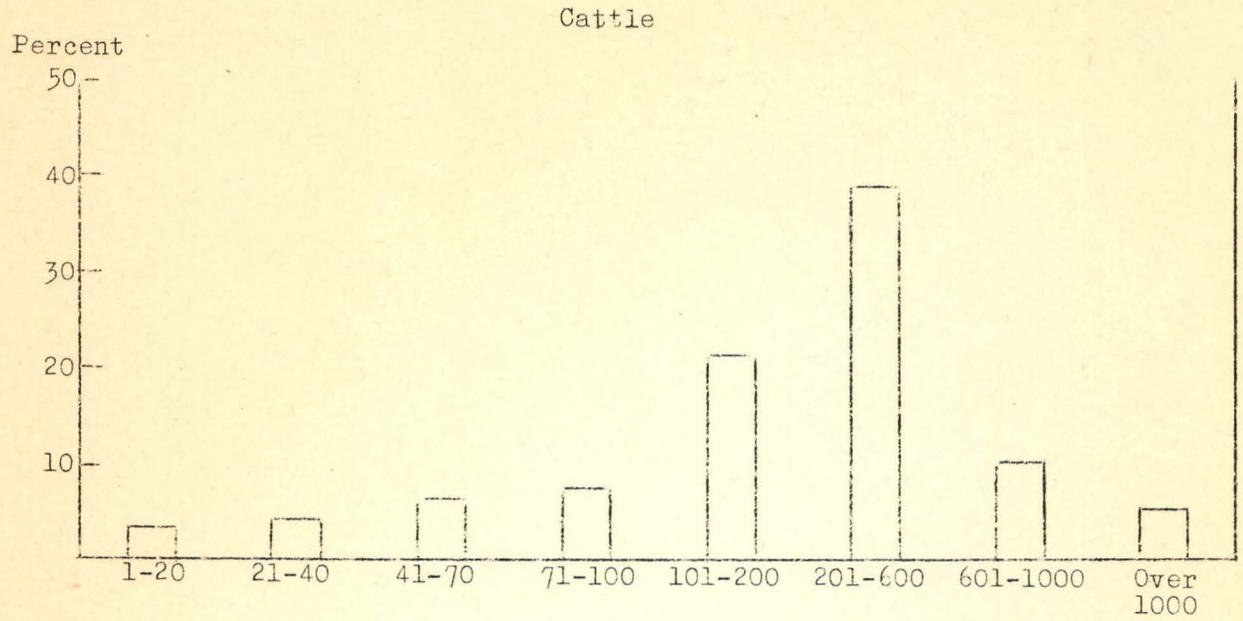


Figure 76.- Percent of total cattle and sheep months use on the Teton National Forest used by the various size classes of livestock enterprises.



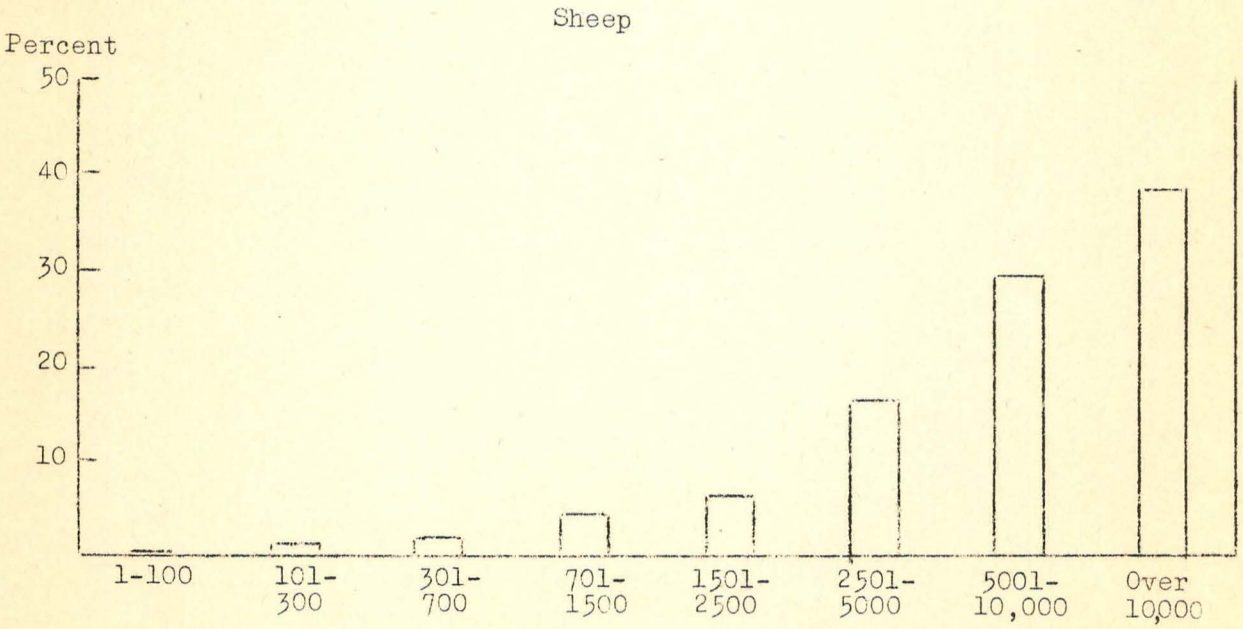
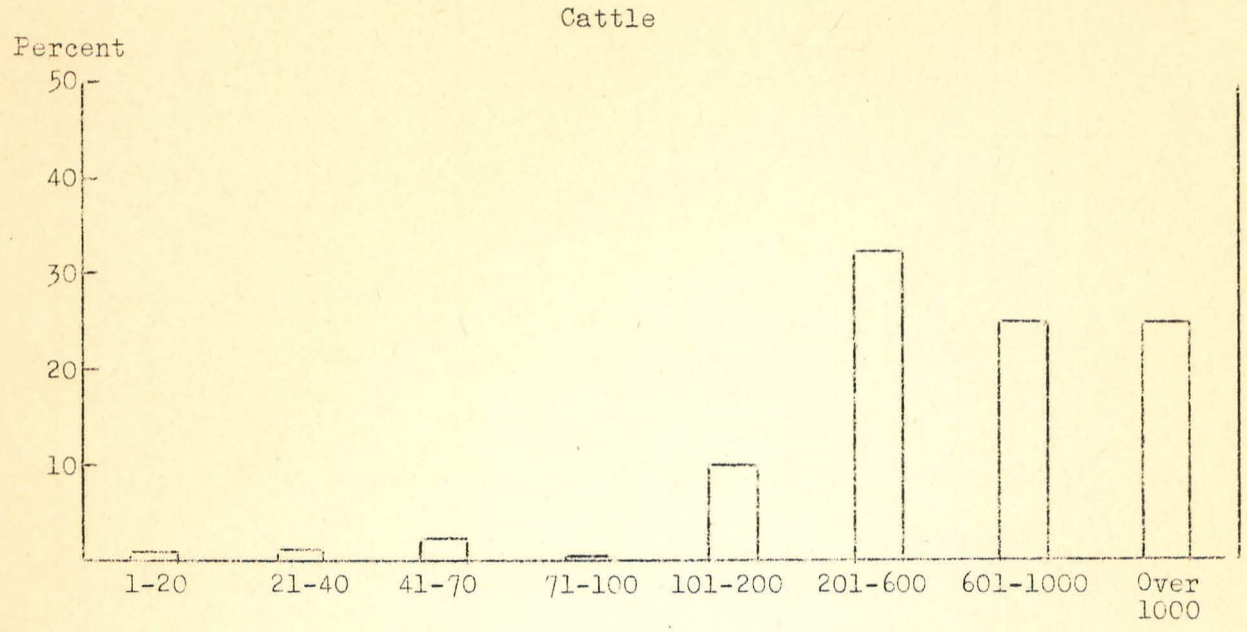


Figure 77.- Percent of total cattle and sheep months use on the Green River Grazing District used by the various size classes of livestock enterprises.



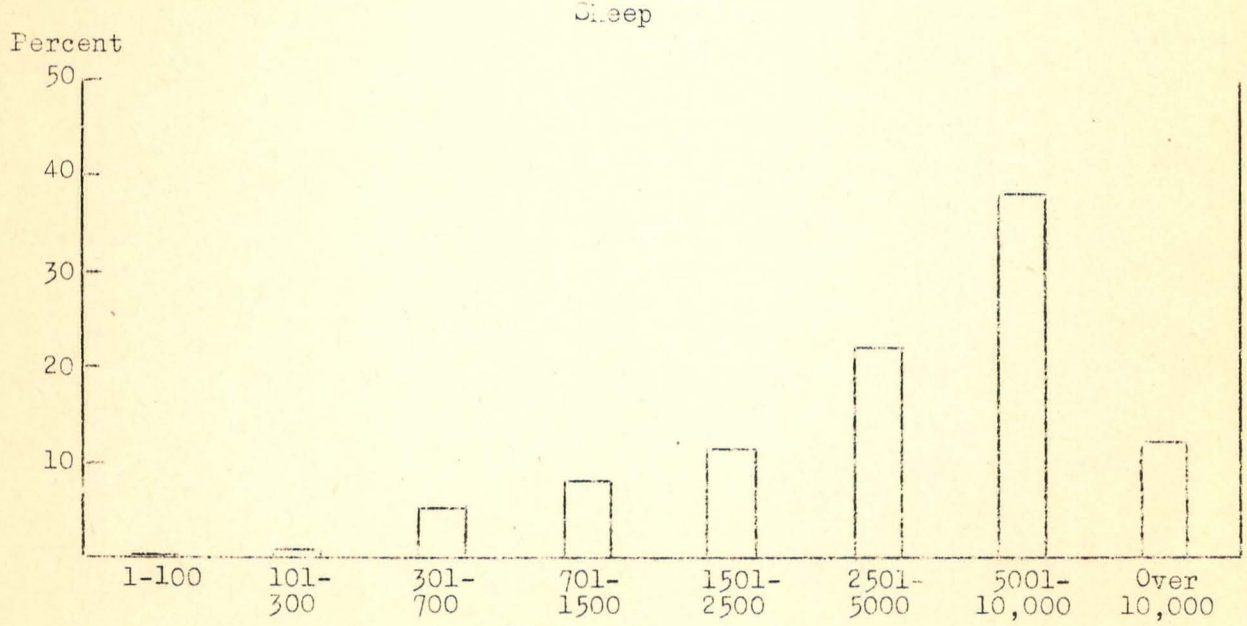


Figure 78.- Percent of total cattle and sheep months use on the Sublette Grazing District used by the various size classes of livestock enterprises.